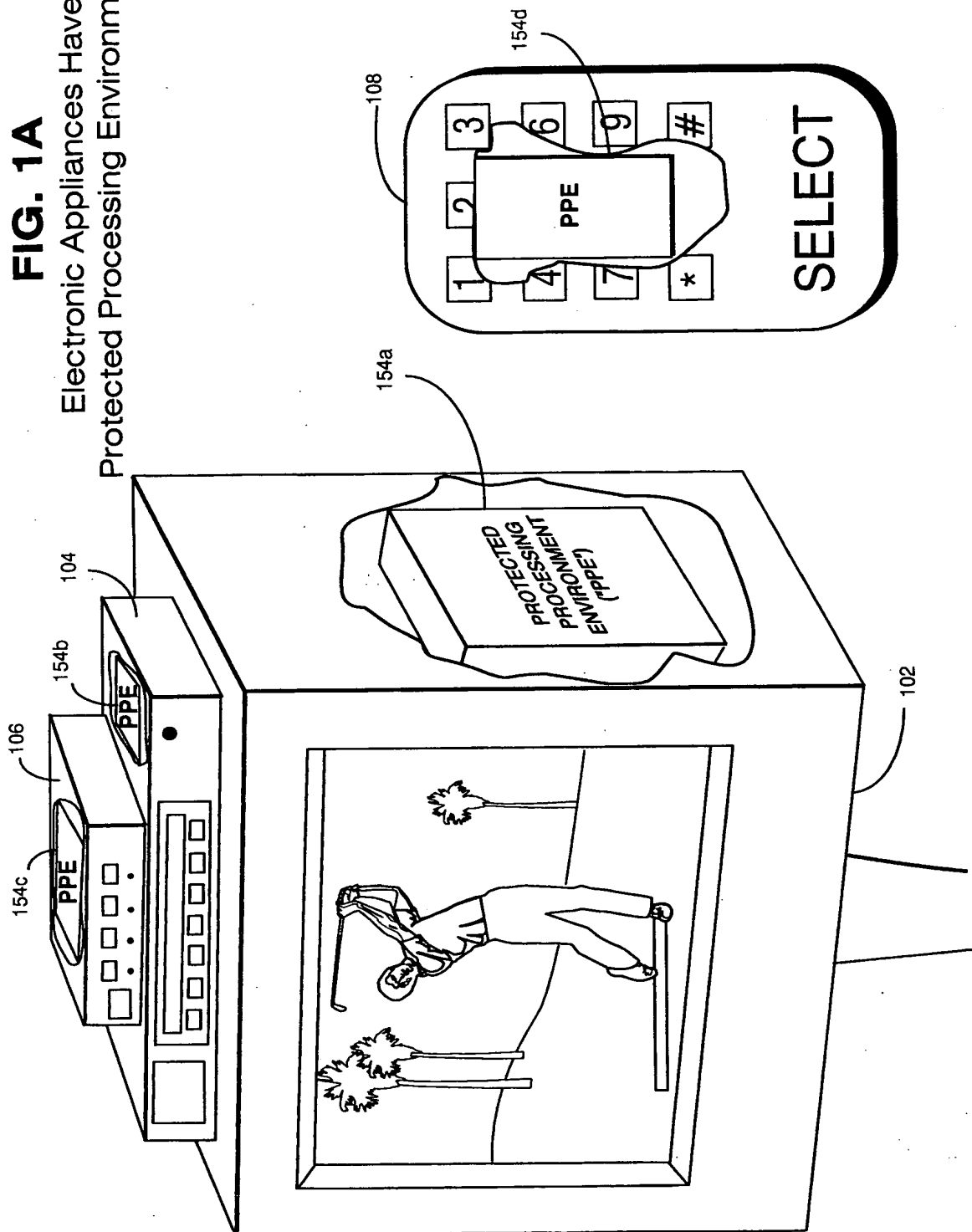


FIG. 1

FIG. 1A
Electronic Appliances Have
Protected Processing Environments



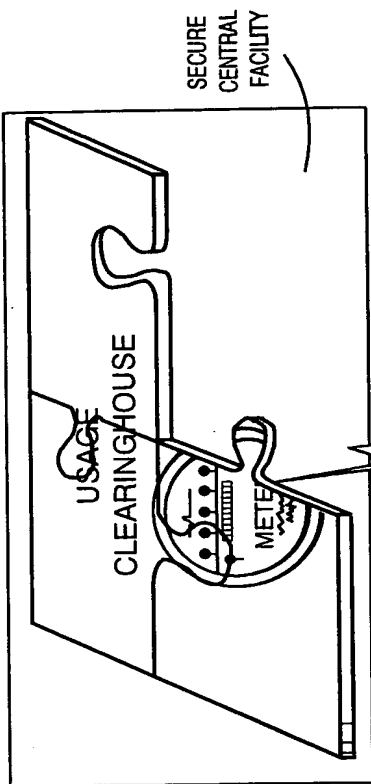


FIG. 2B

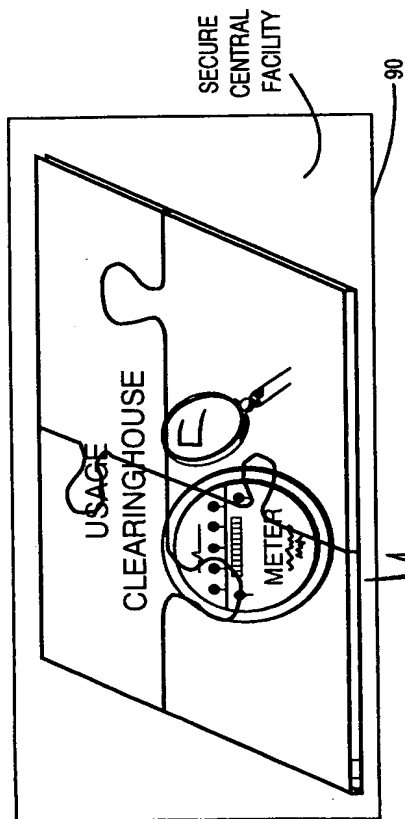
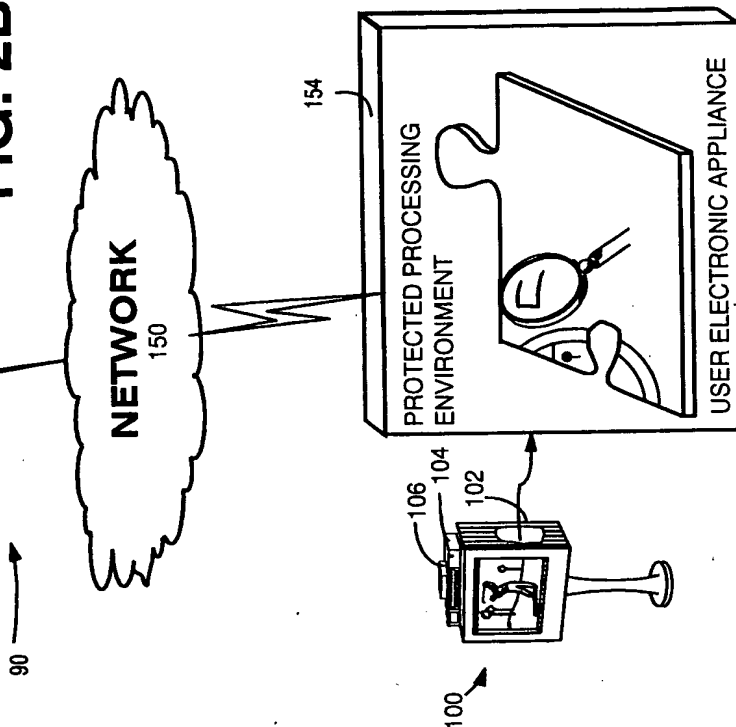
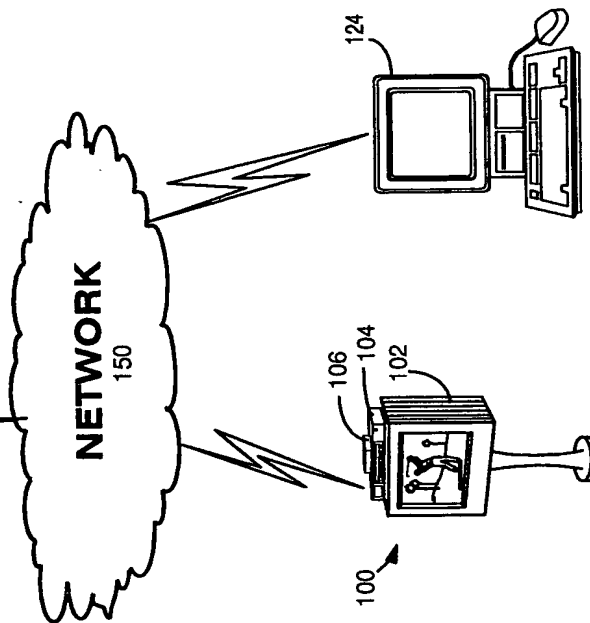


FIG. 2A



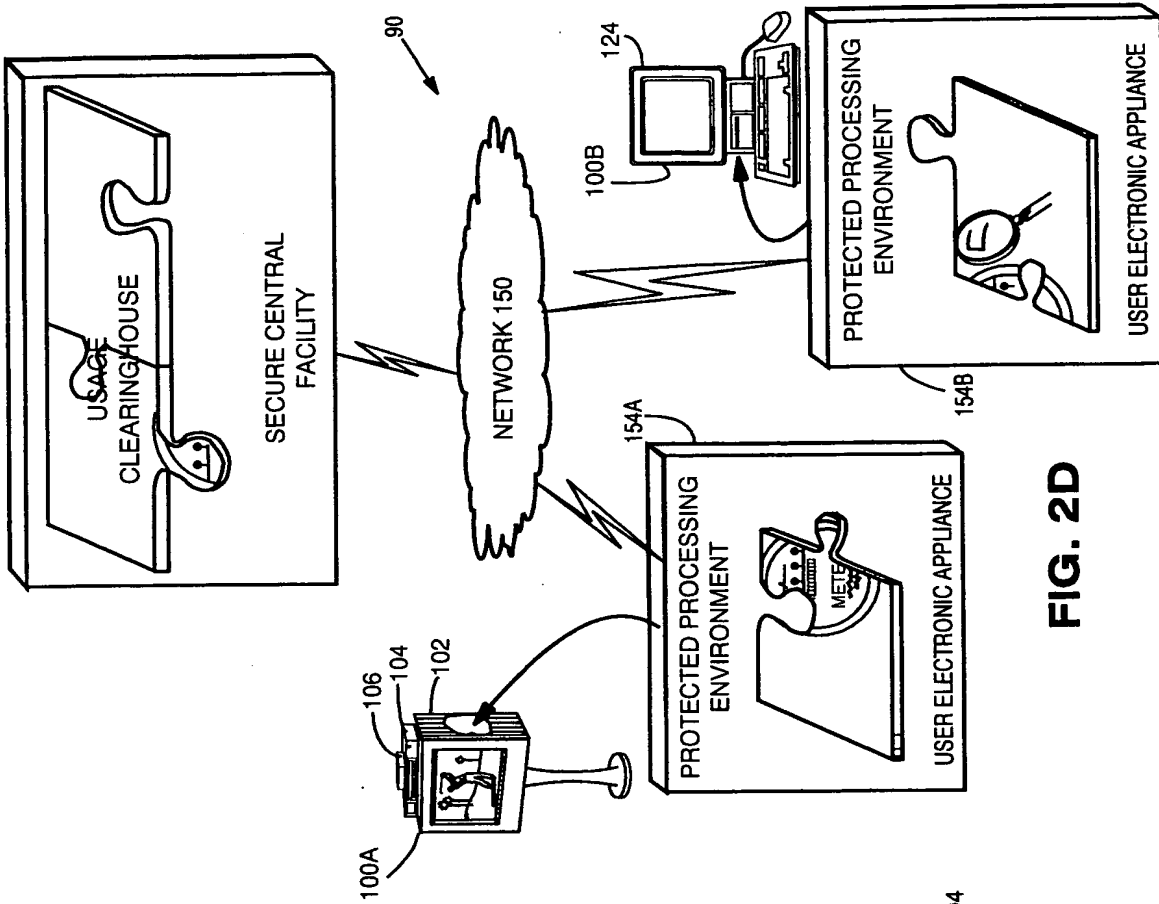


FIG. 2D

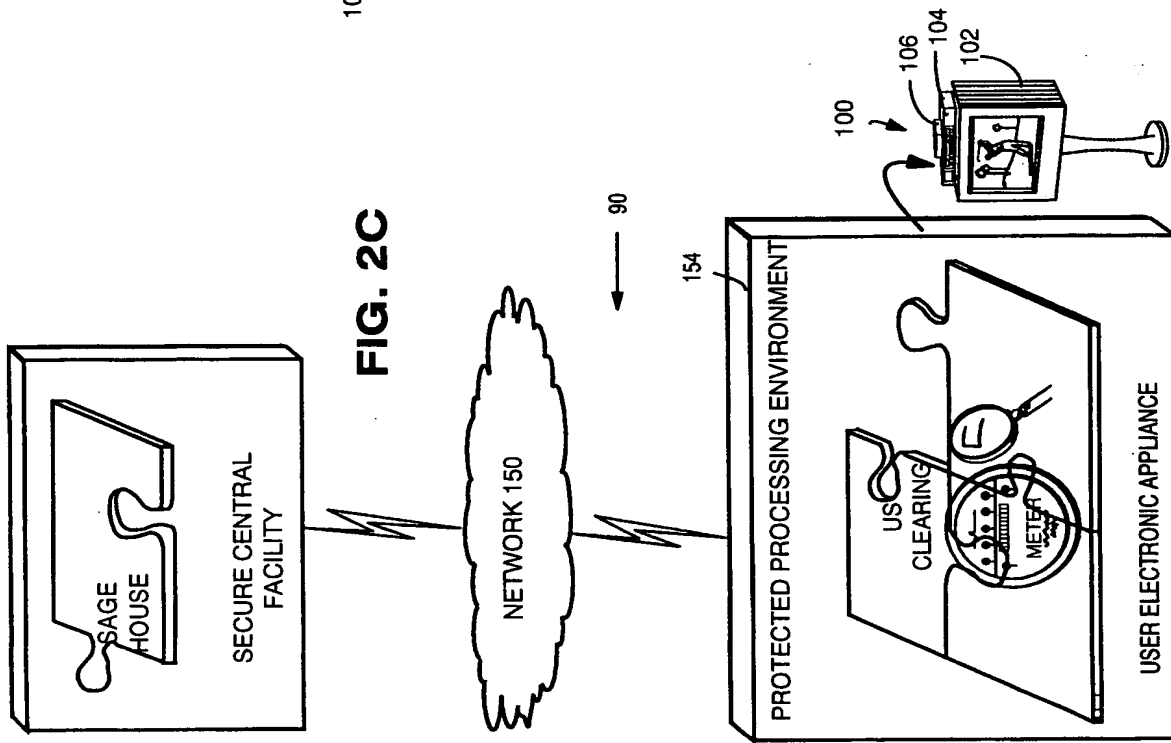


FIG. 2C

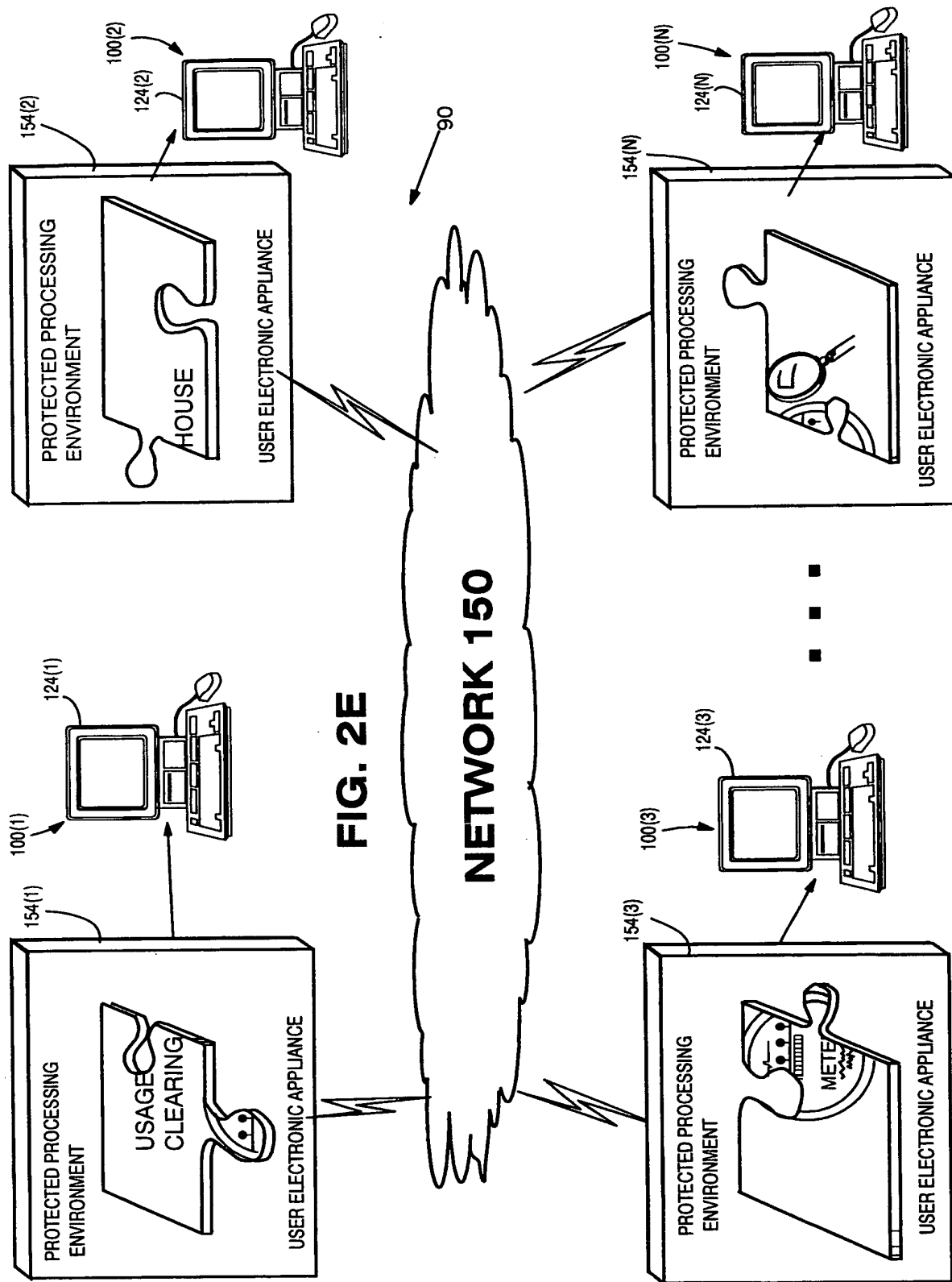


FIG. 3A
Distributed Commerce
Utility Systems

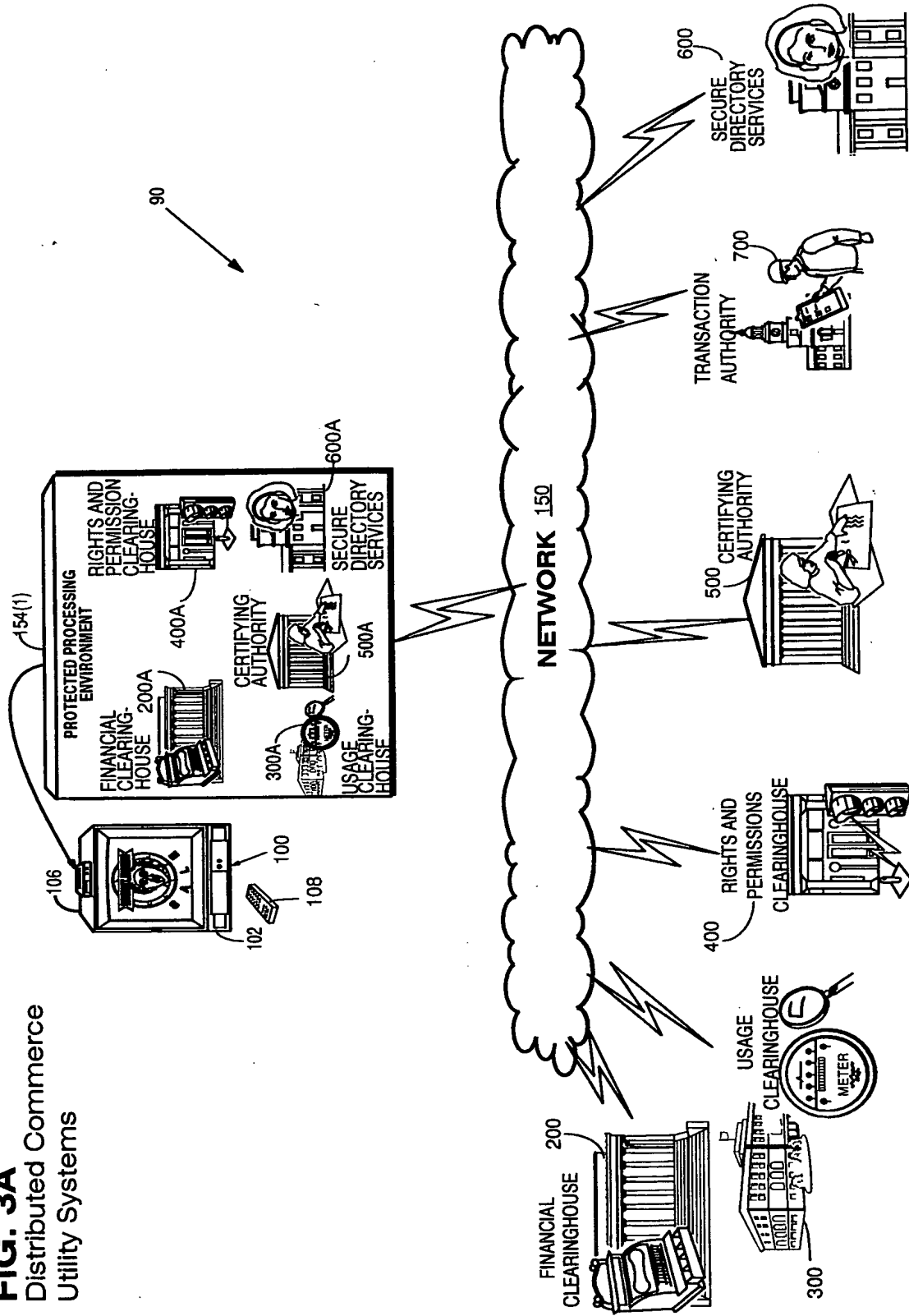


FIG. 3B
Distributed Commerce
Utility Systems

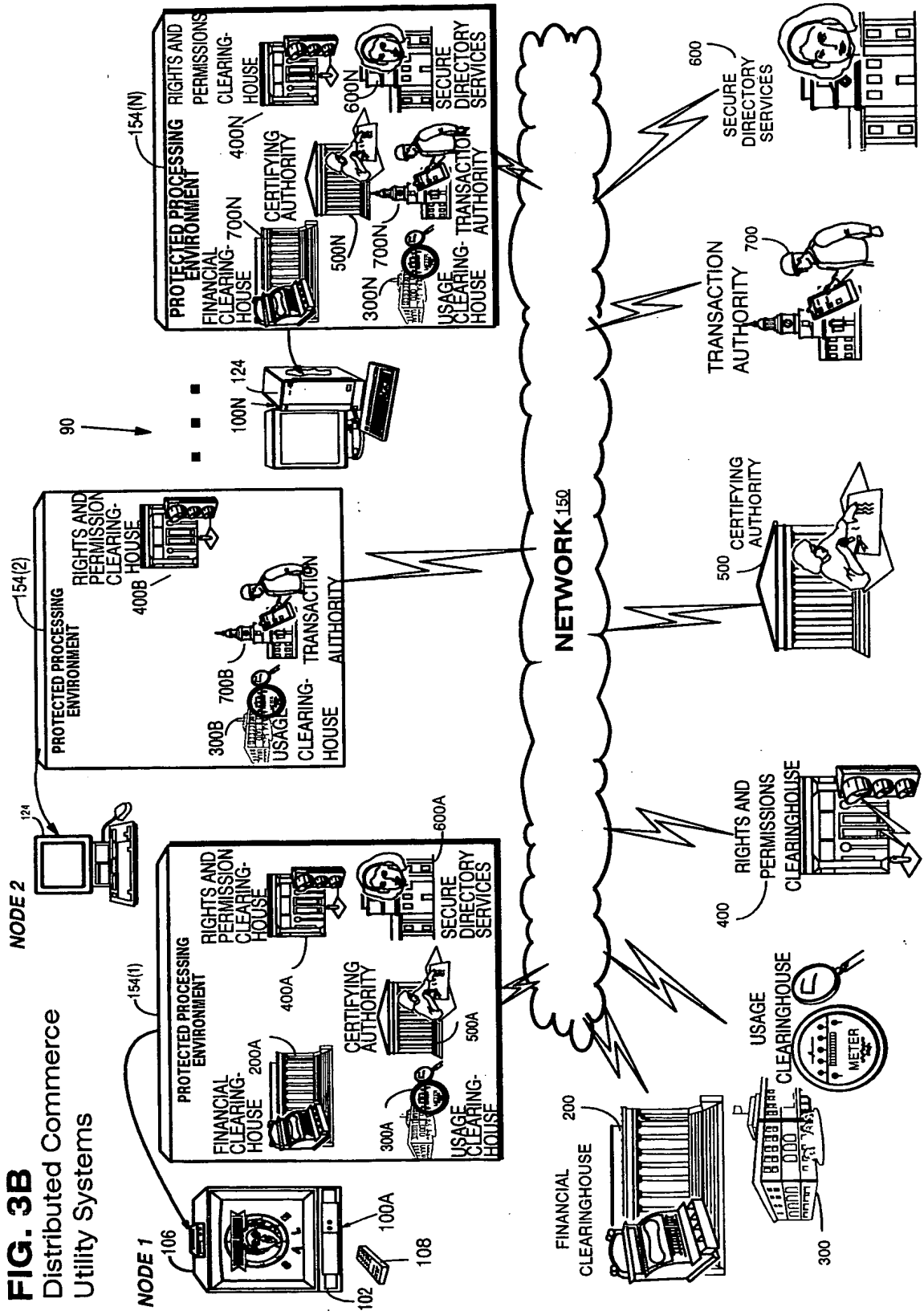


FIG. 3C

Distributed Commerce
Utility Systems

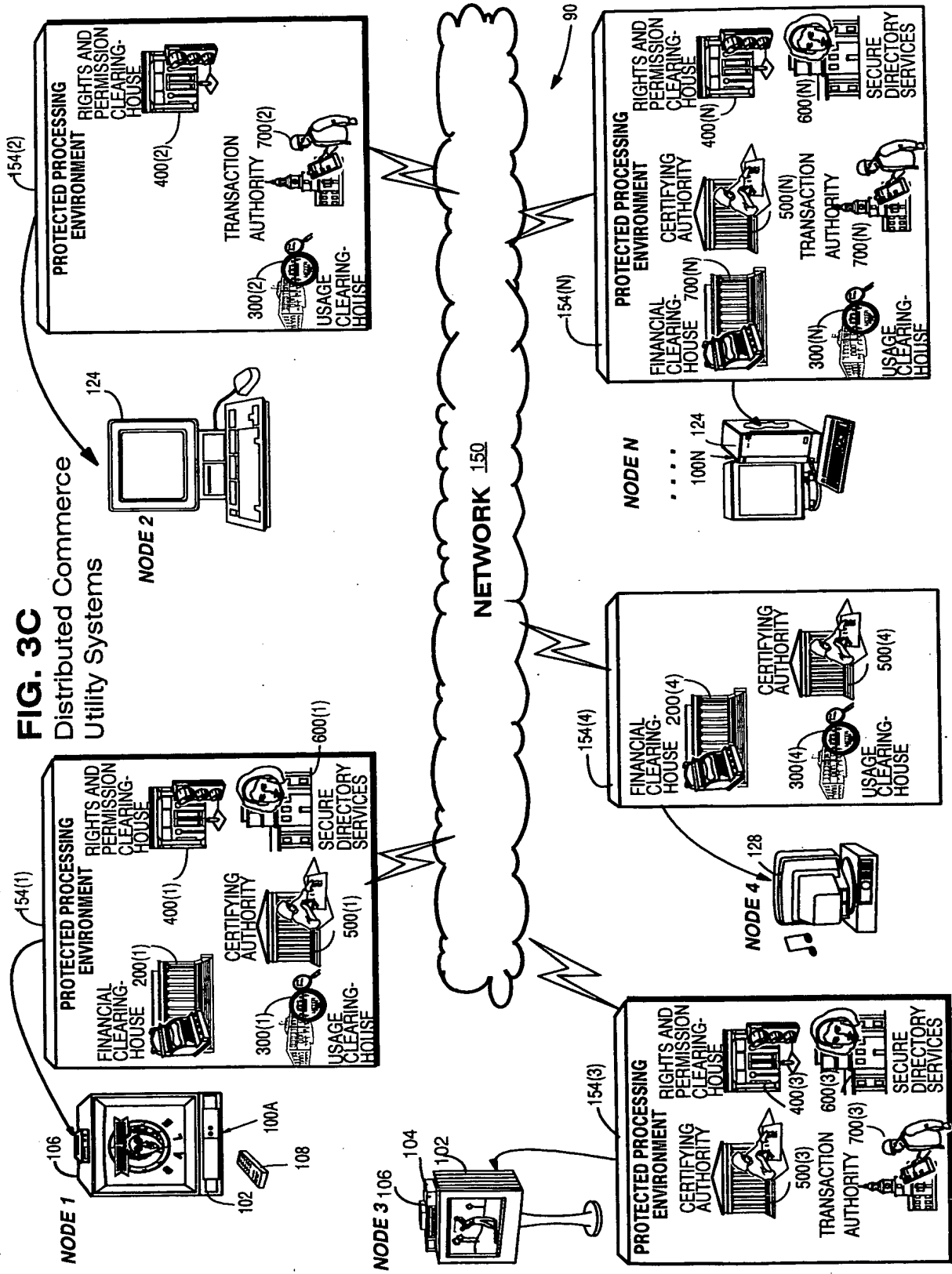
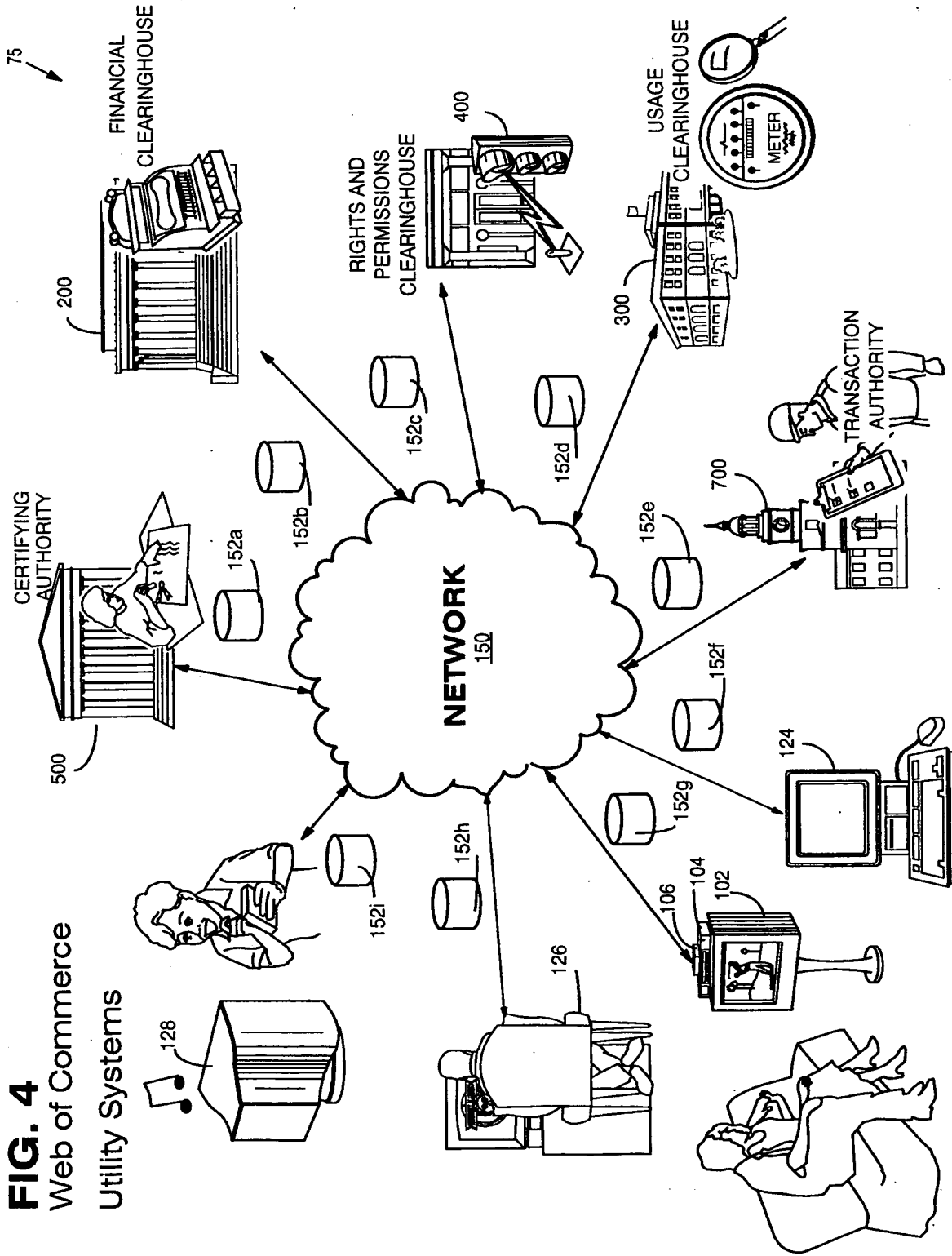


FIG. 4
Web of Commerce
Utility Systems



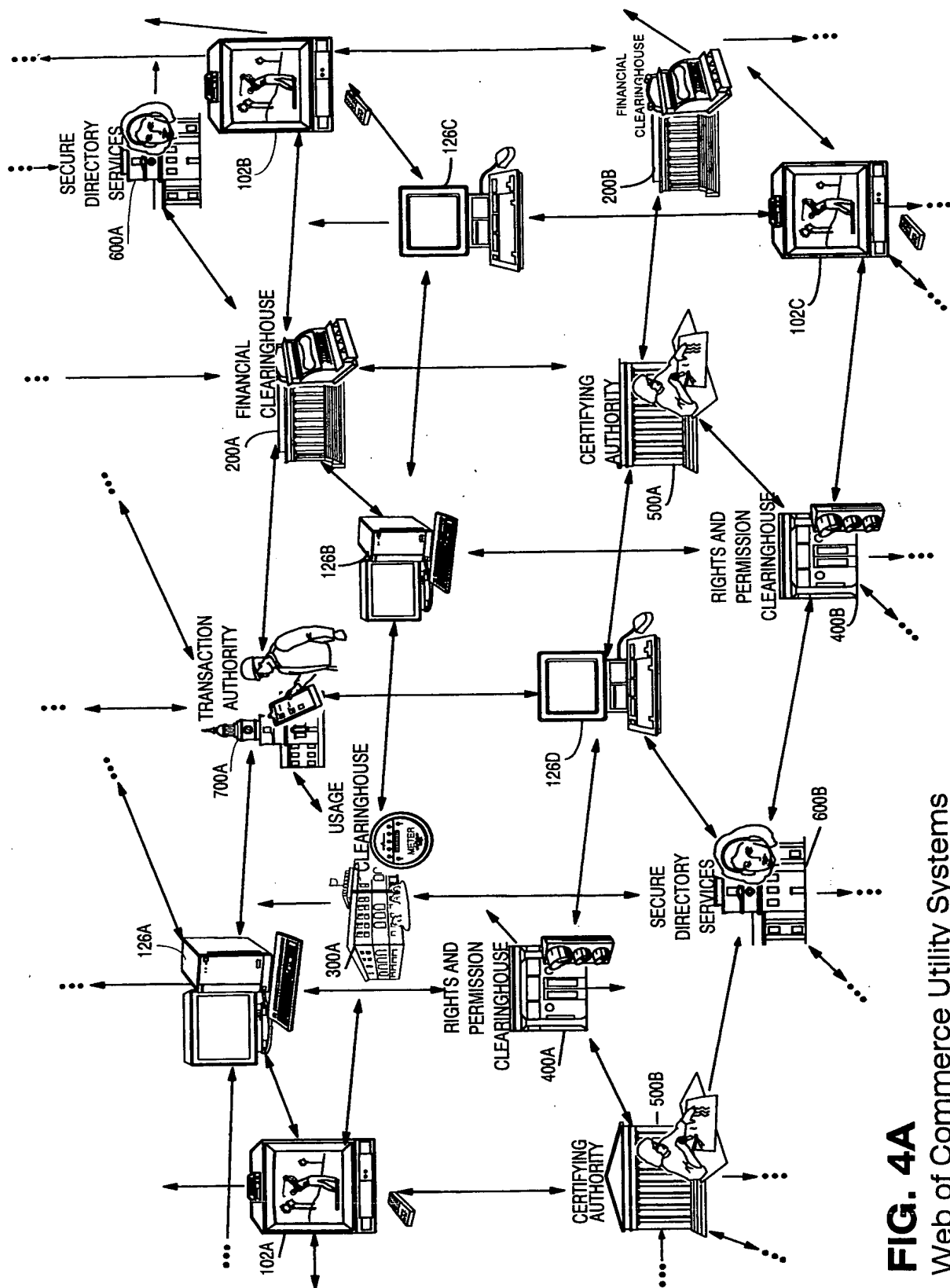


FIG. 4A
Web of Commerce Utility Systems

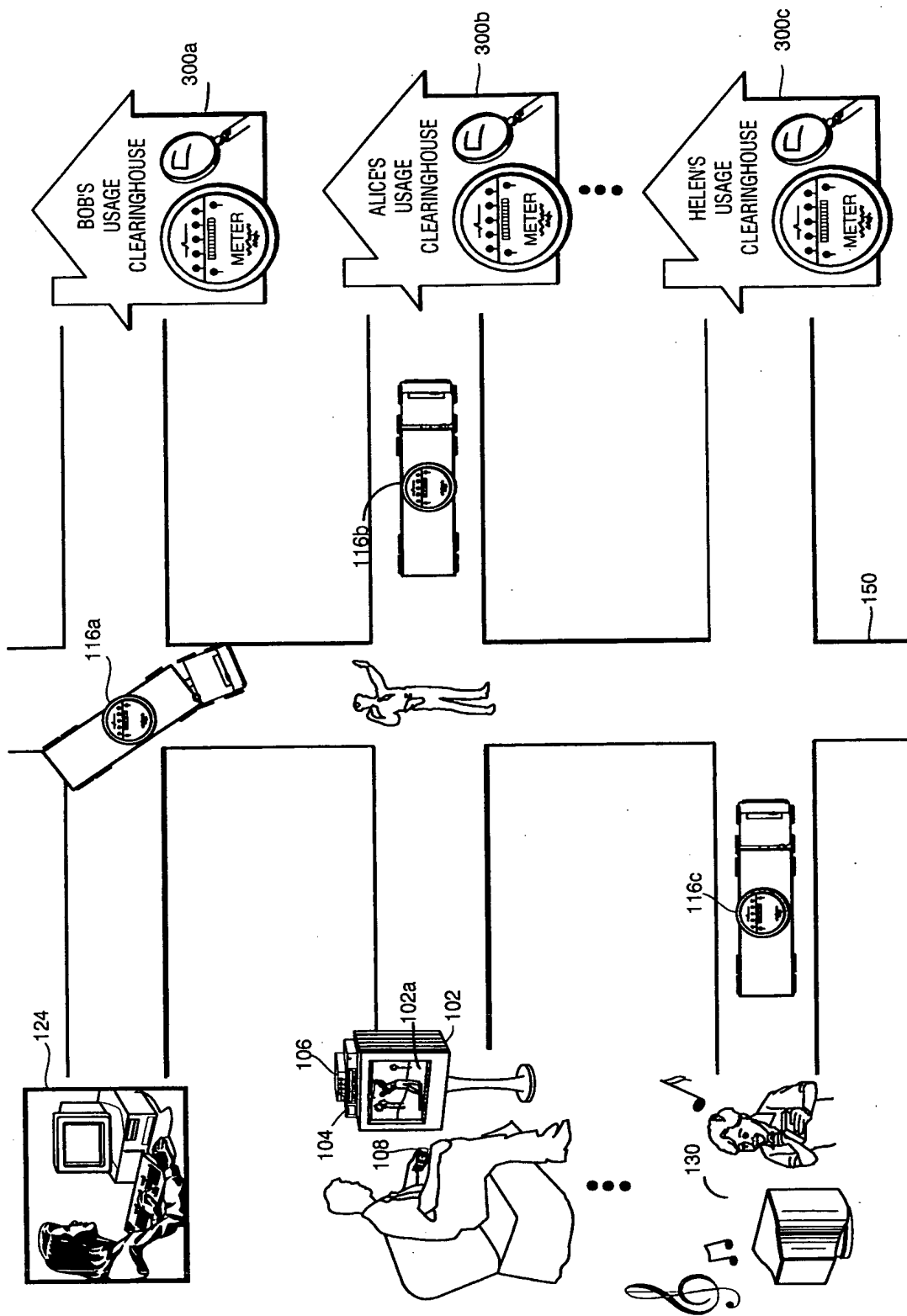
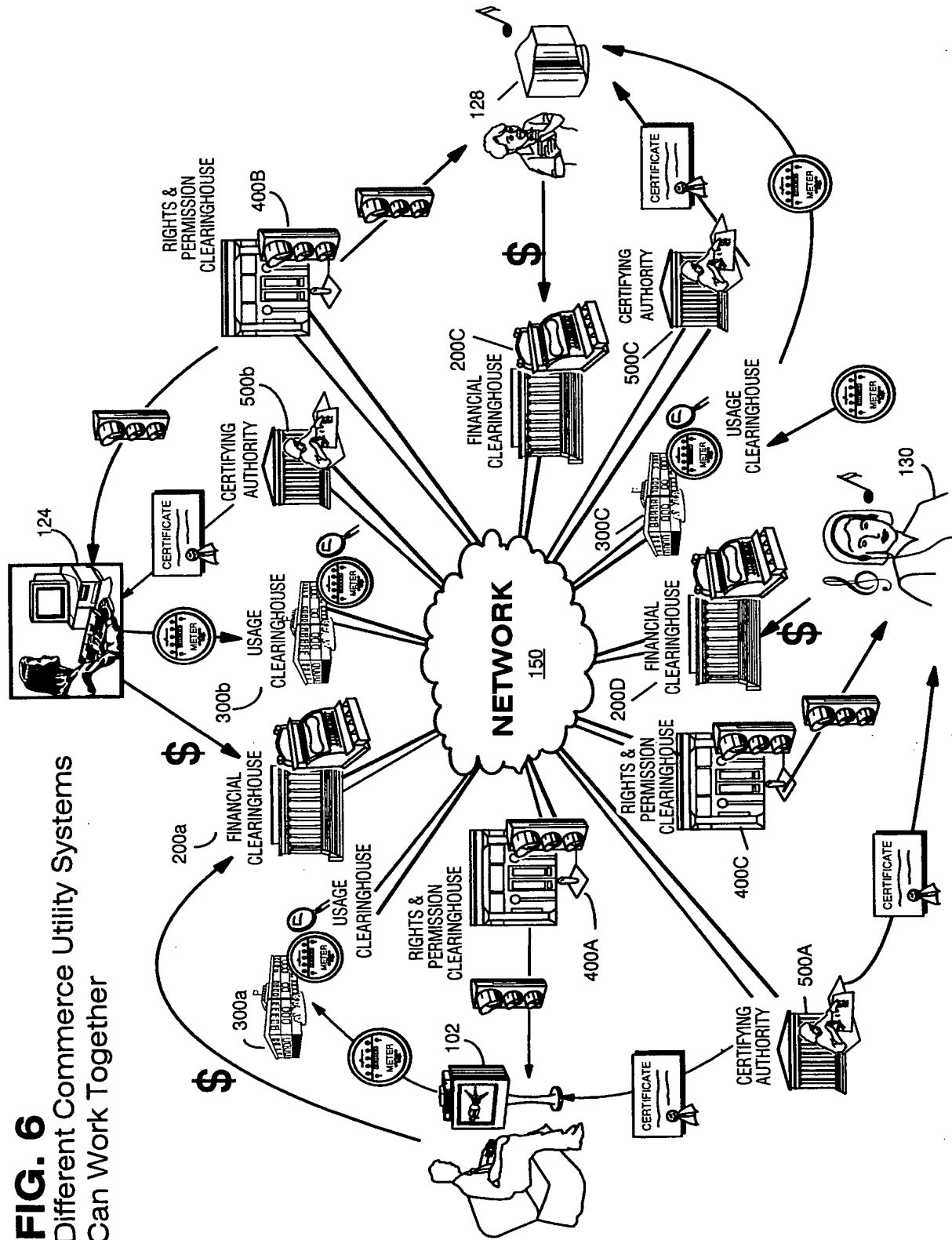


FIG. 5

Rights Holders Can Choose Between Commerce Utility Systems

FIG. 6
Different Commerce Utility Systems
Can Work Together



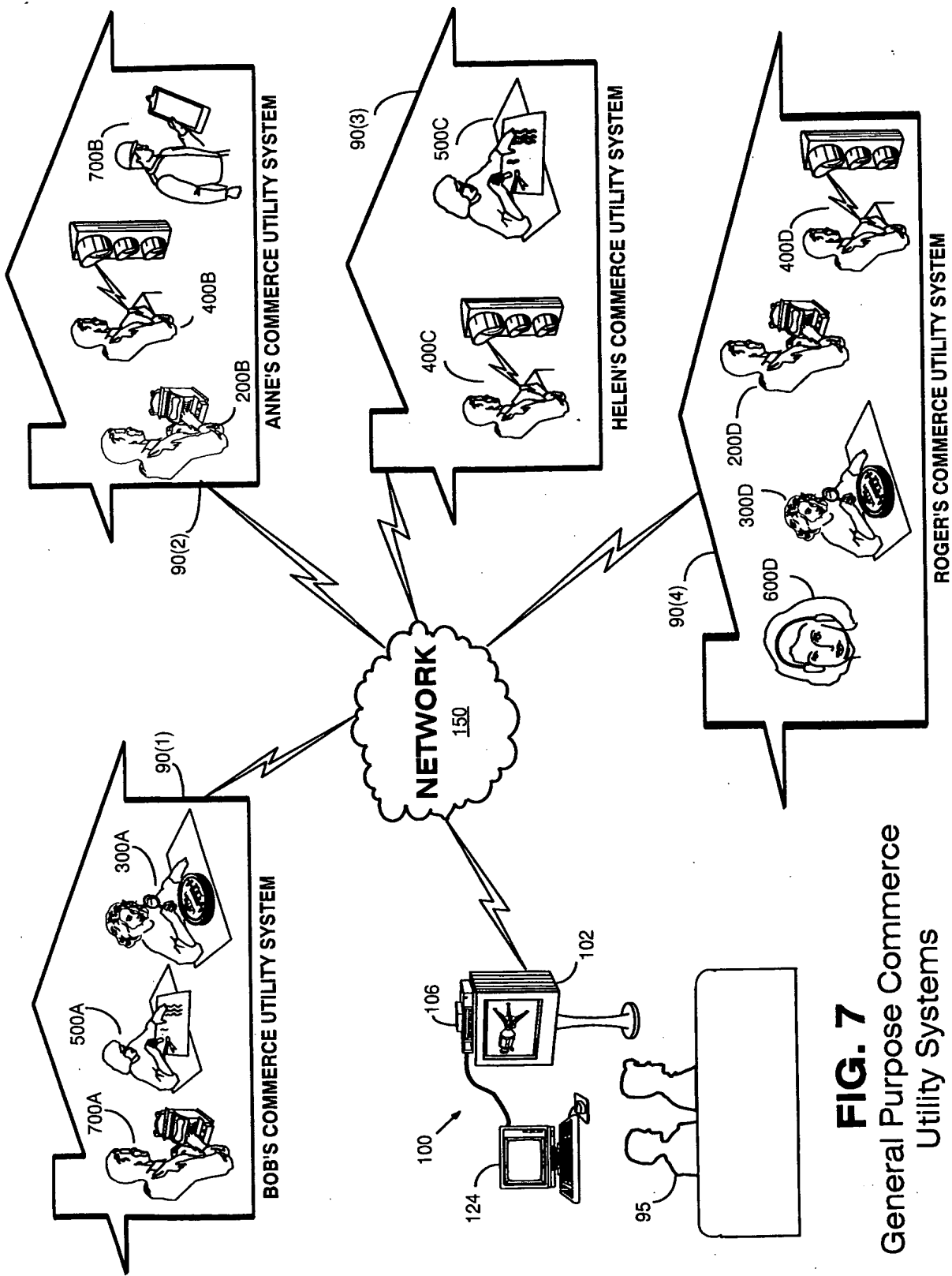


FIG. 7
General Purpose Commerce
Utility Systems

FIG. 8A

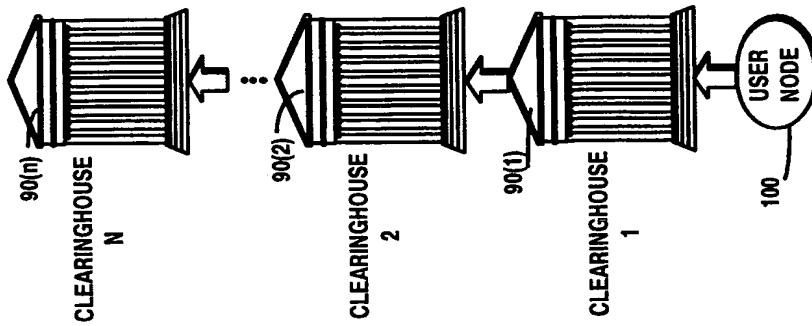


FIG. 8B

Hierarchy Of Commerce
Utility Systems

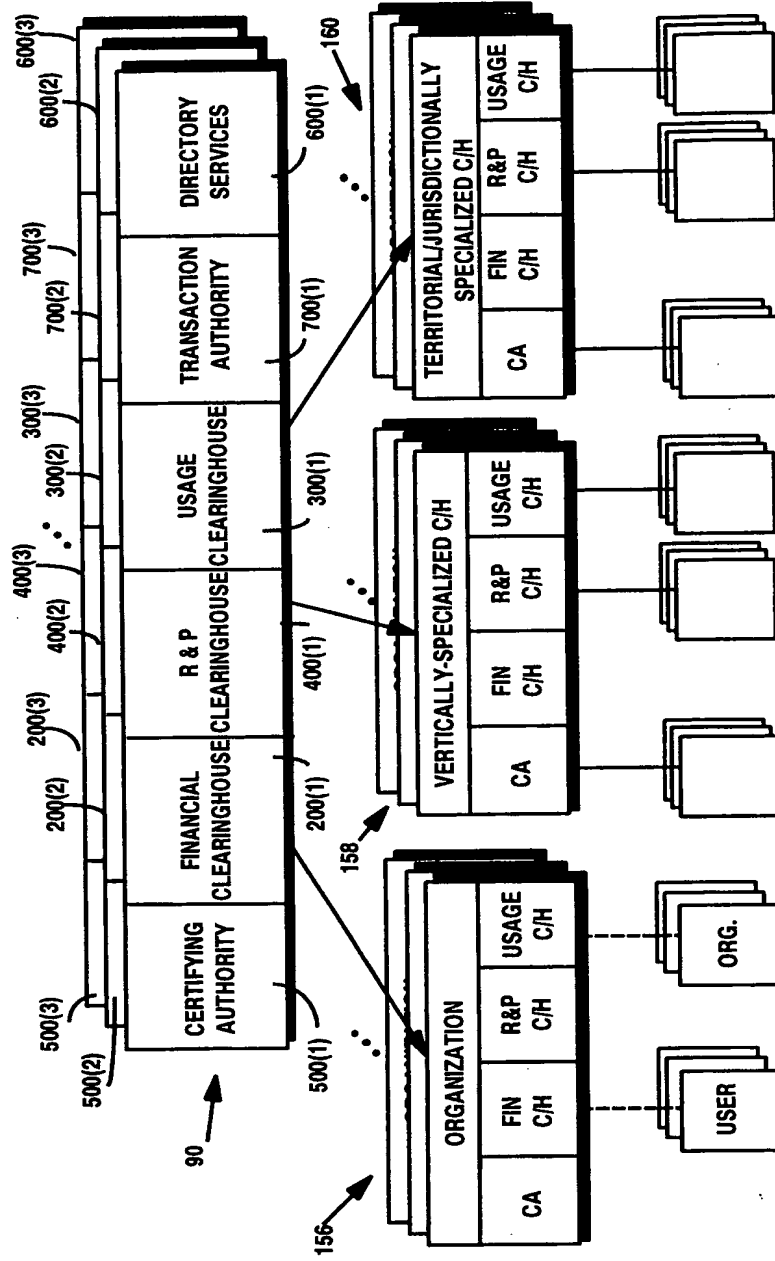


FIG. 9

Hierarchical and/or
Webbed (Peer to Peer)
Commerce Utility Systems

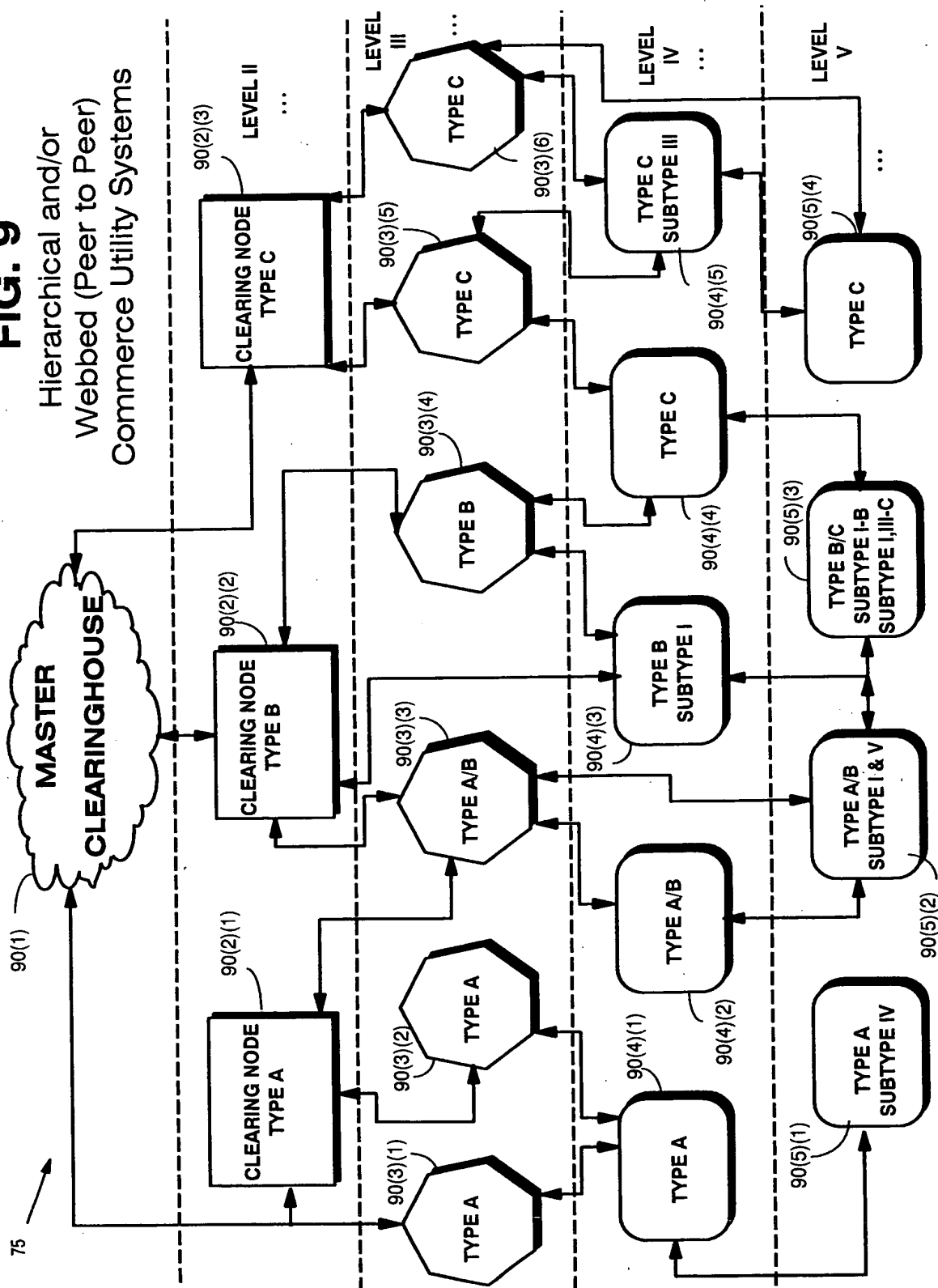


FIG. 10 Financial Clearinghouse

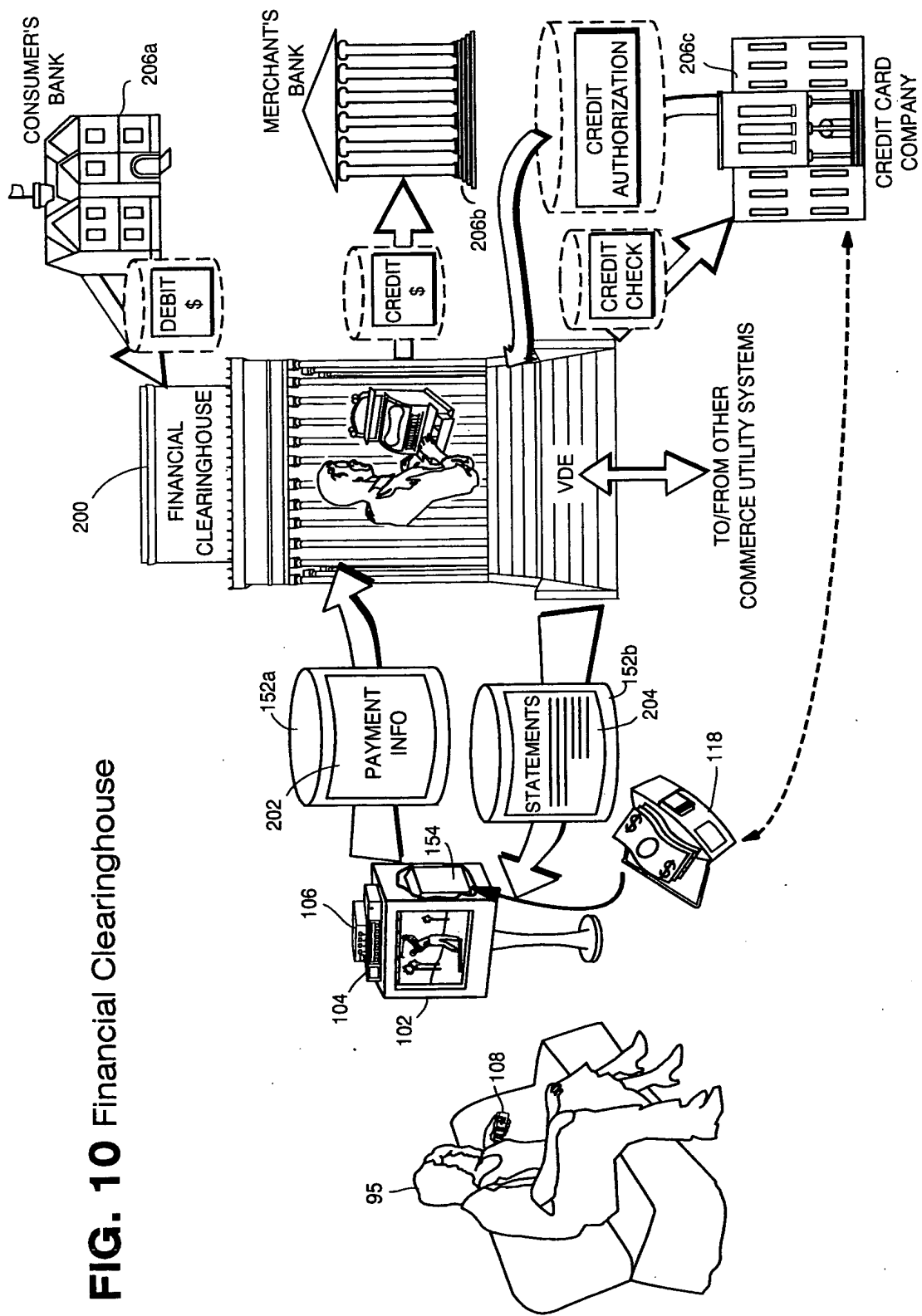
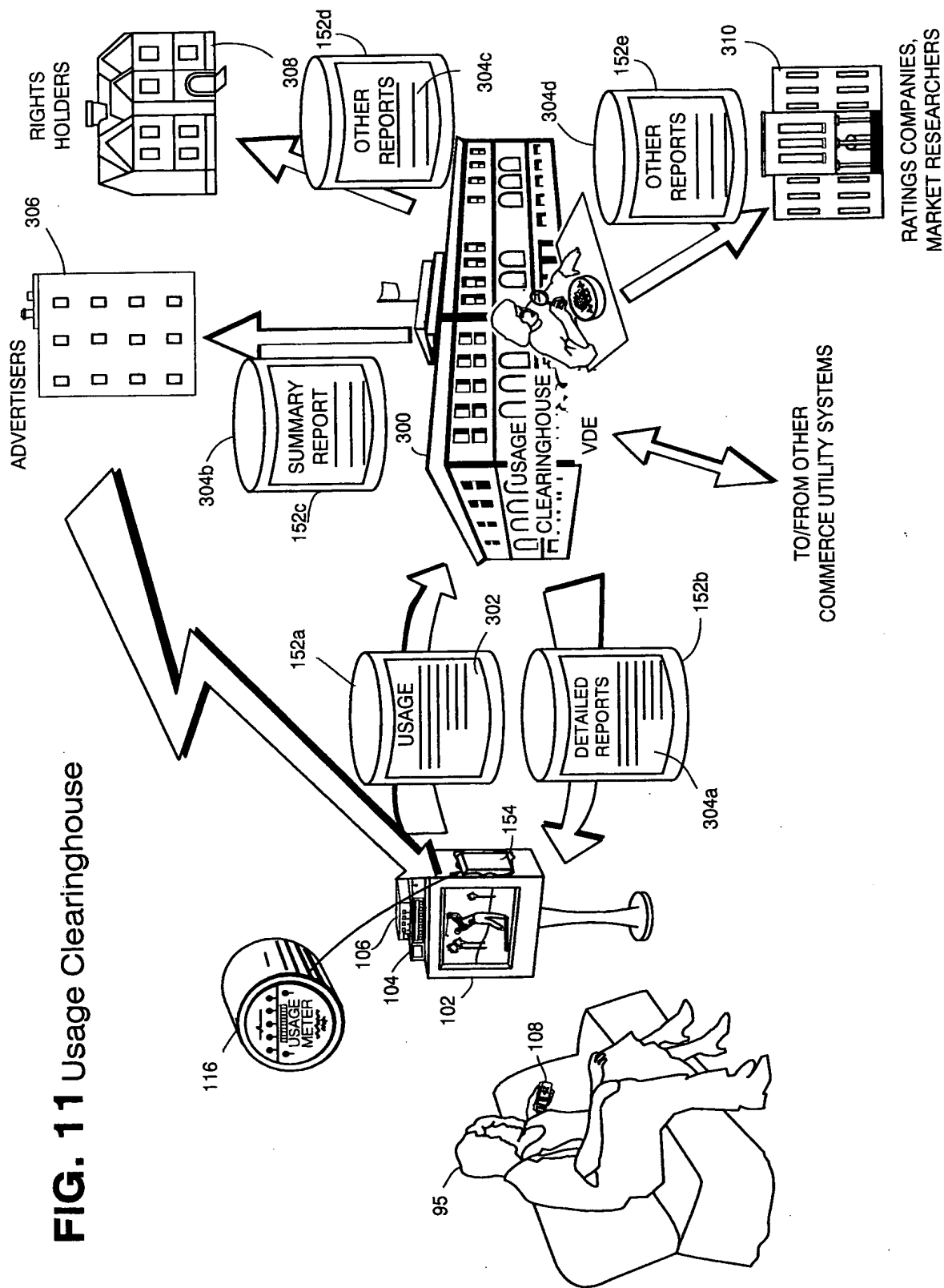


FIG. 11 Usage Clearinghouse



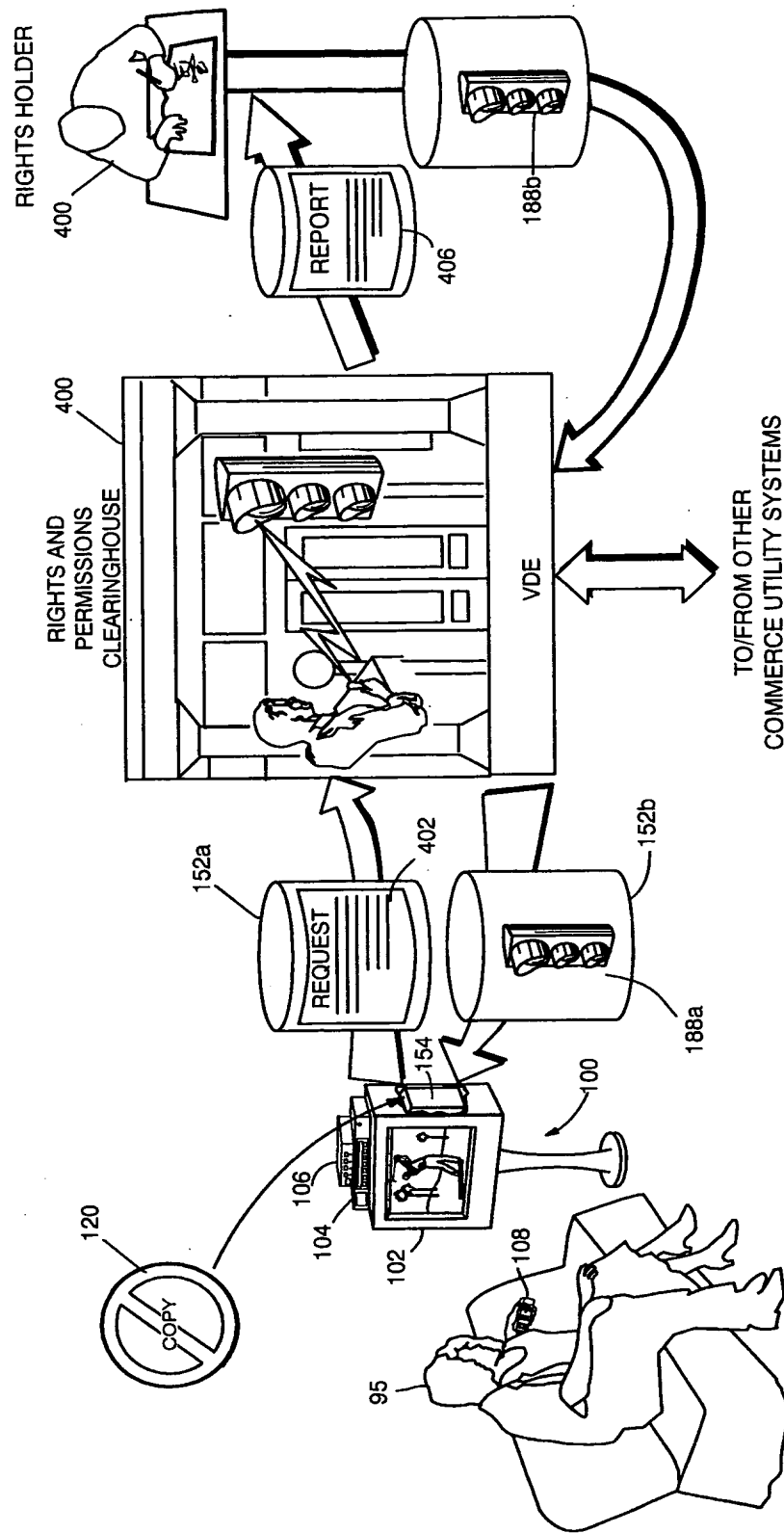


FIG. 13 Certifying Authority

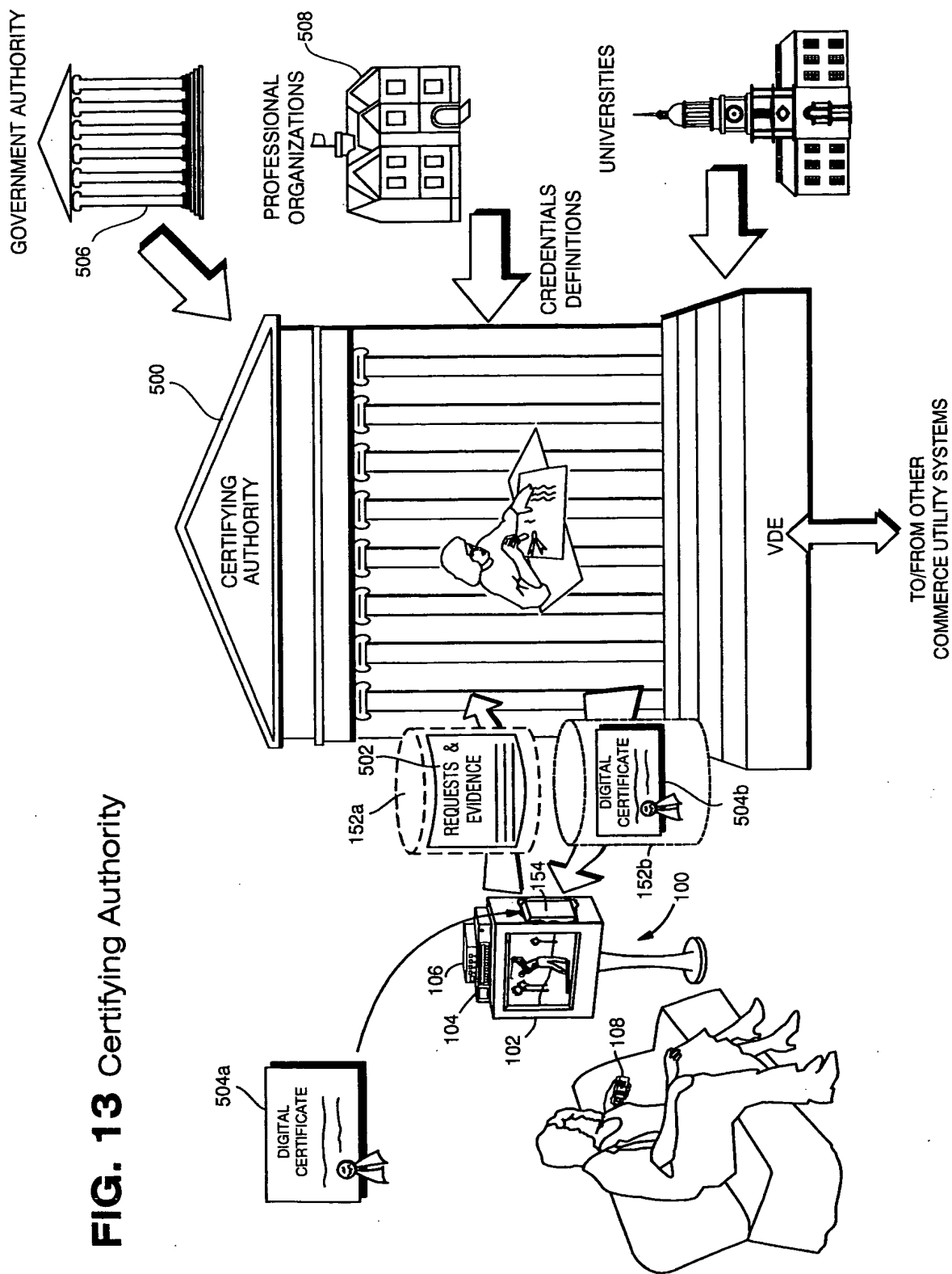


FIG. 14 Secure Directory Services

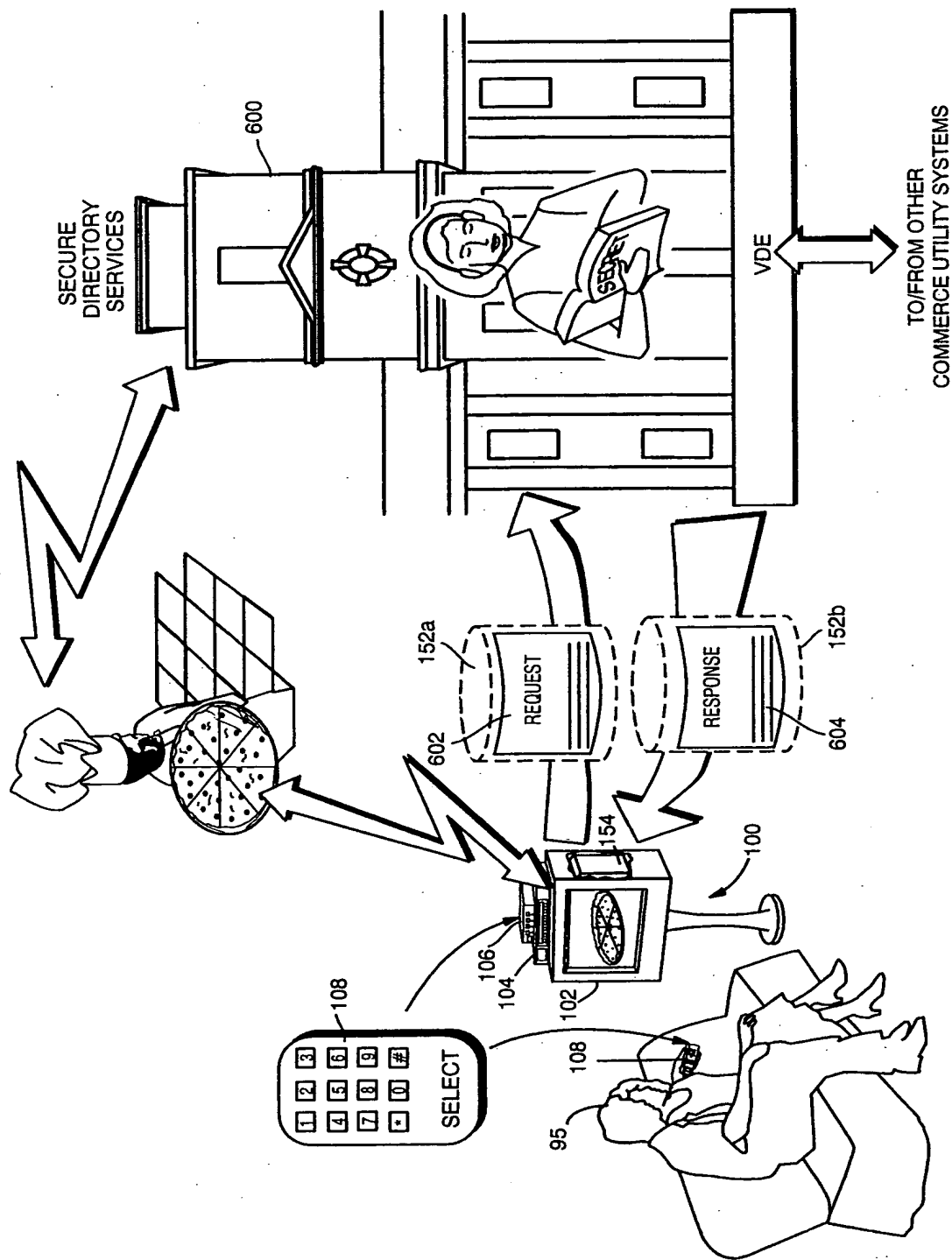
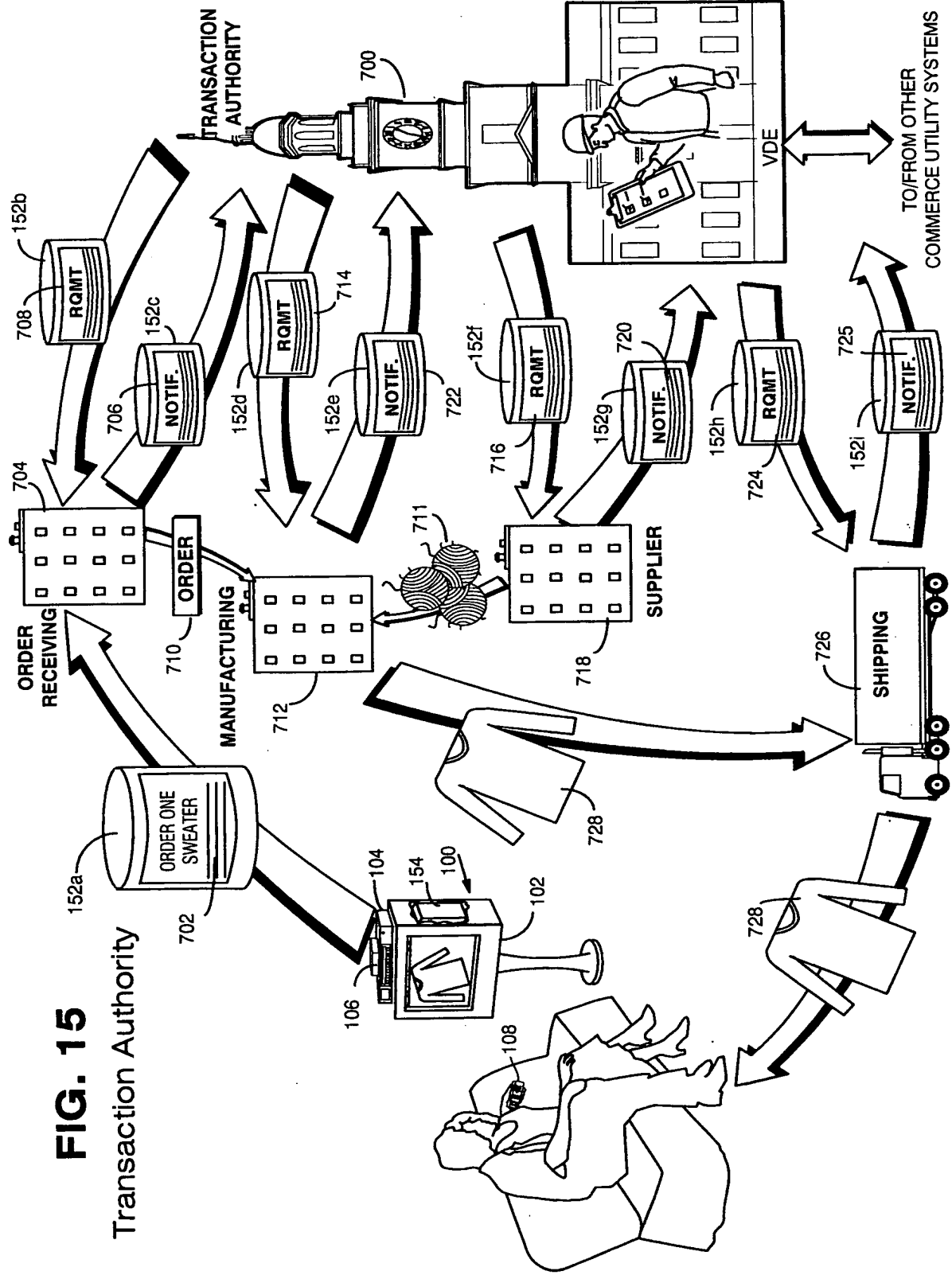


FIG. 15
Transaction Authority



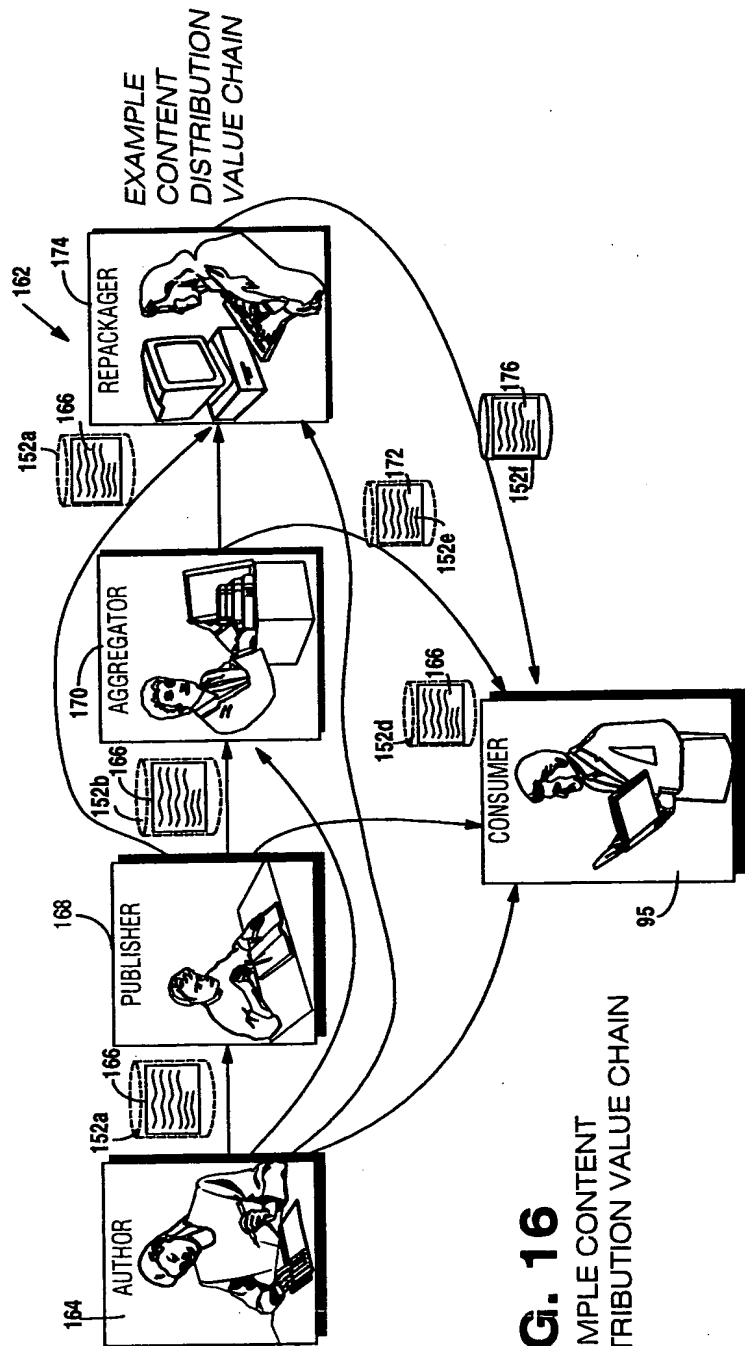


FIG. 16
EXAMPLE CONTENT
DISTRIBUTION VALUE CHAIN

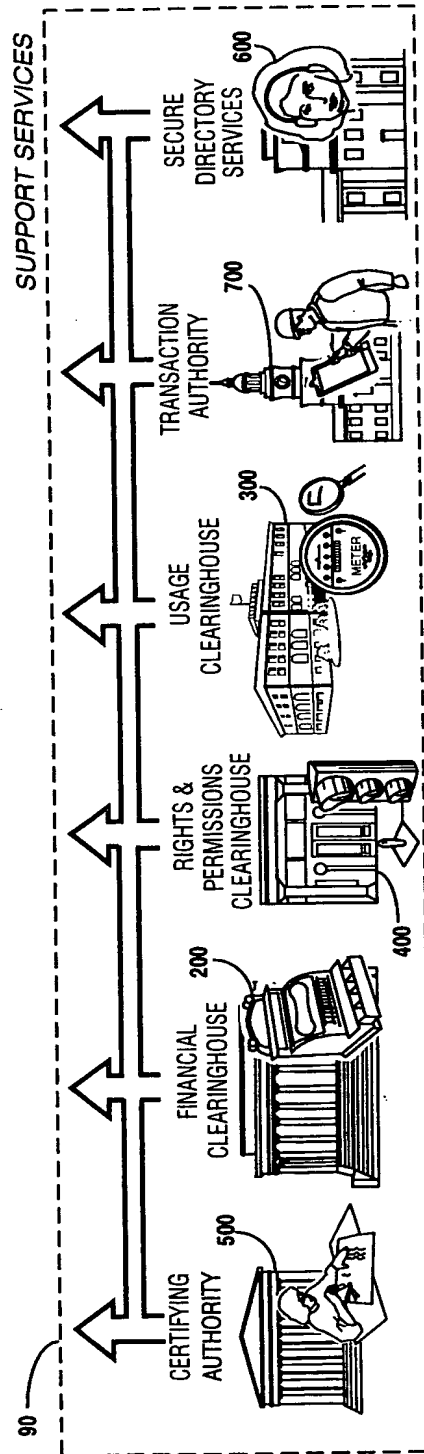


FIG. 16A

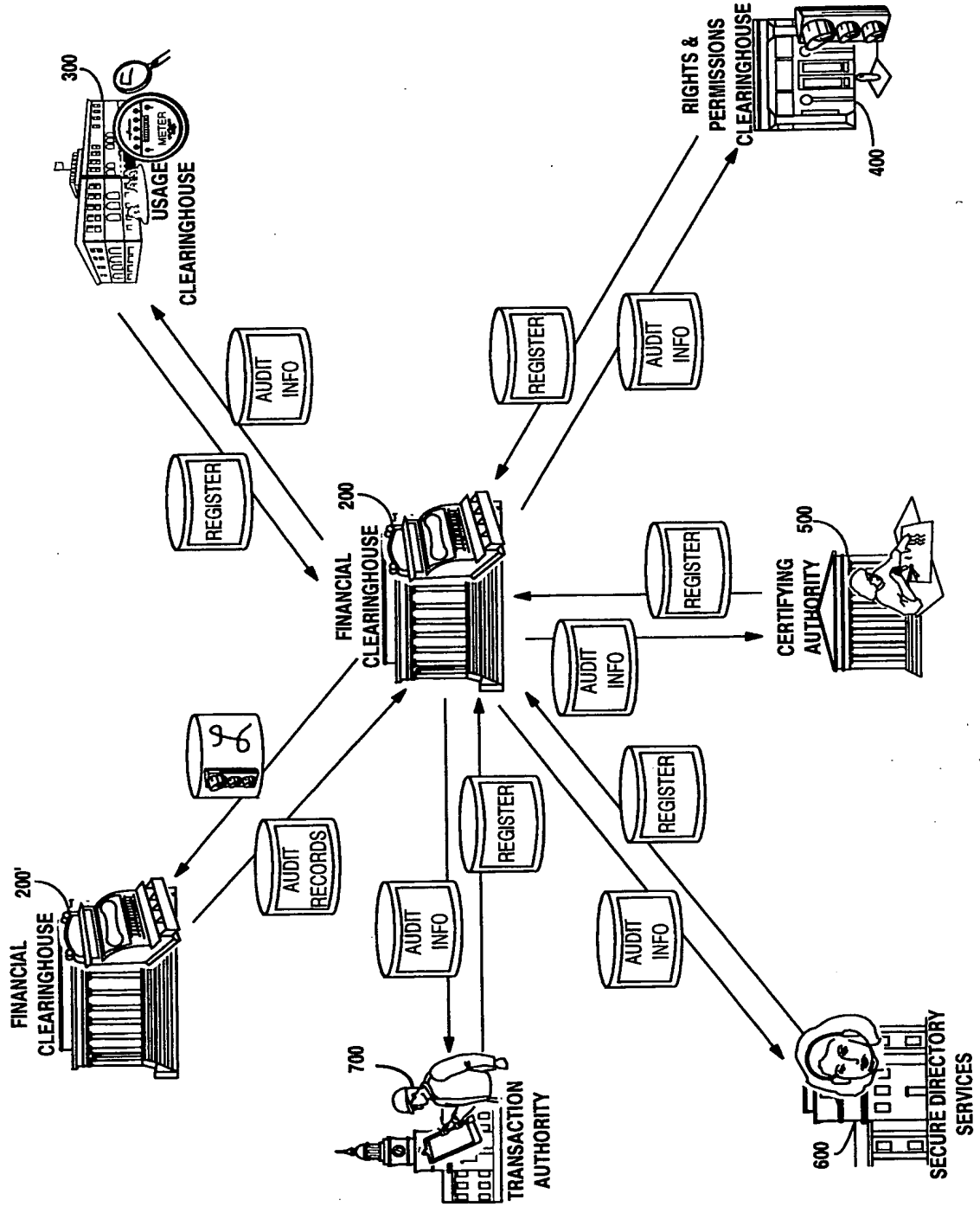


FIG. 16B

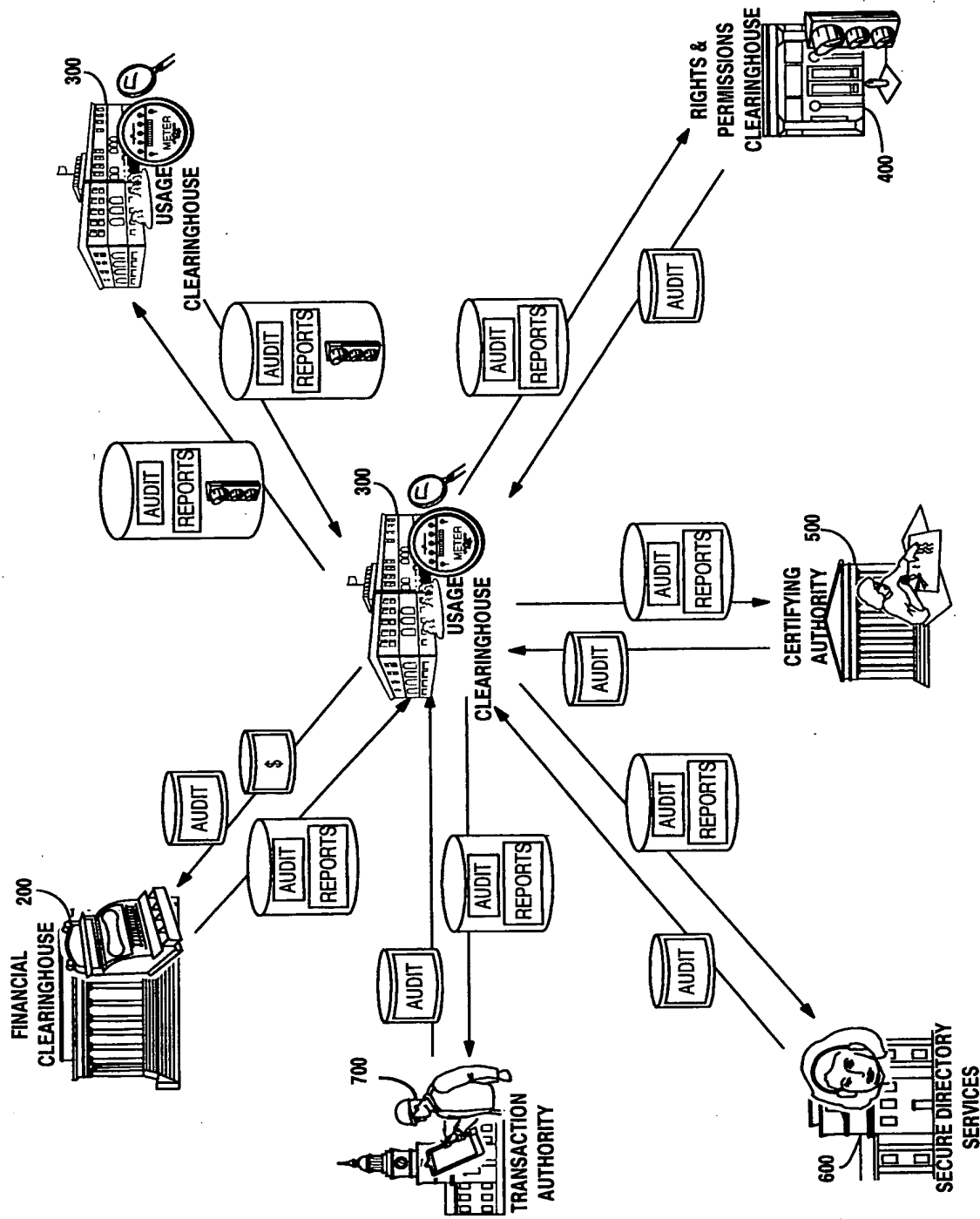


FIG. 16C

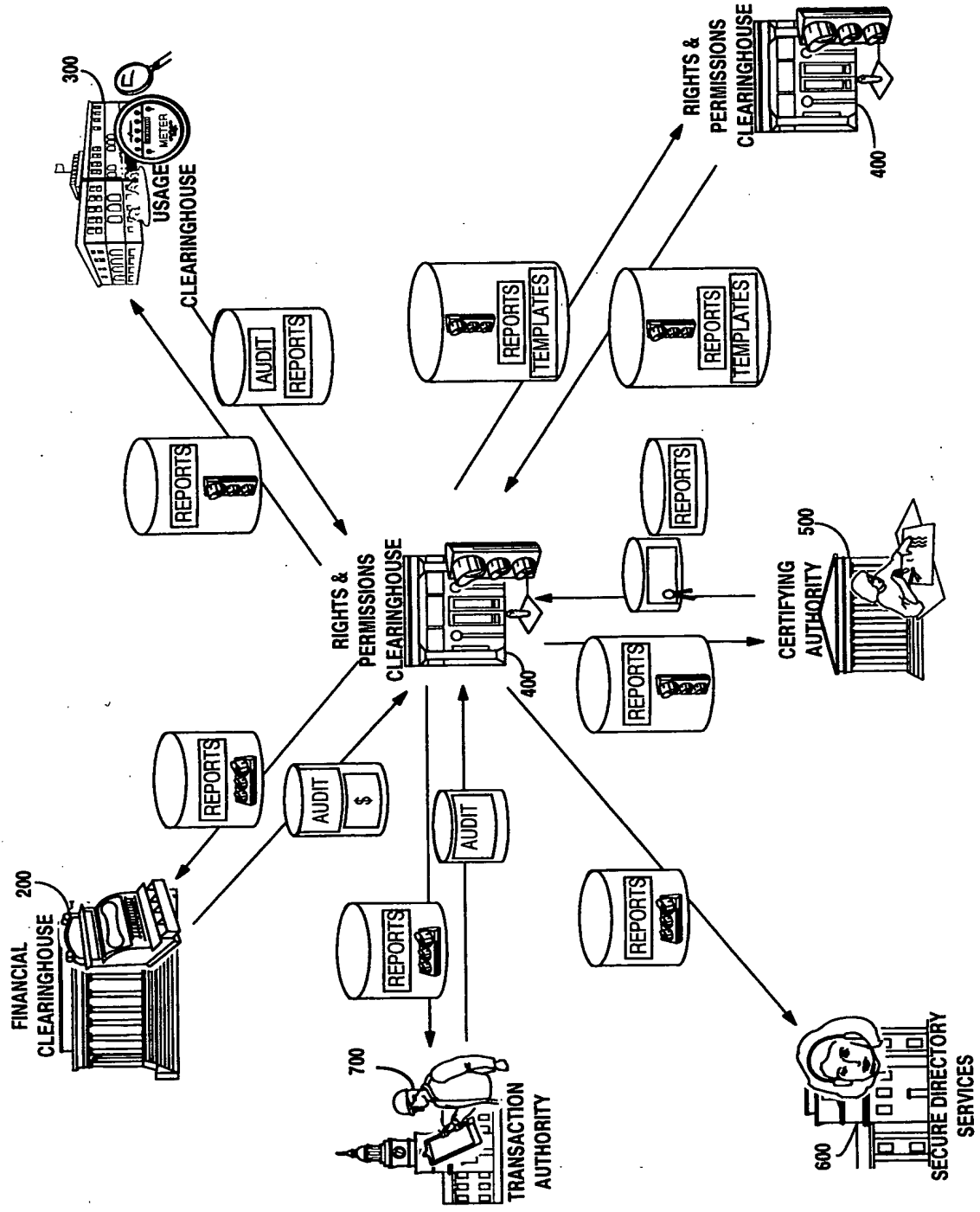


FIG. 16D

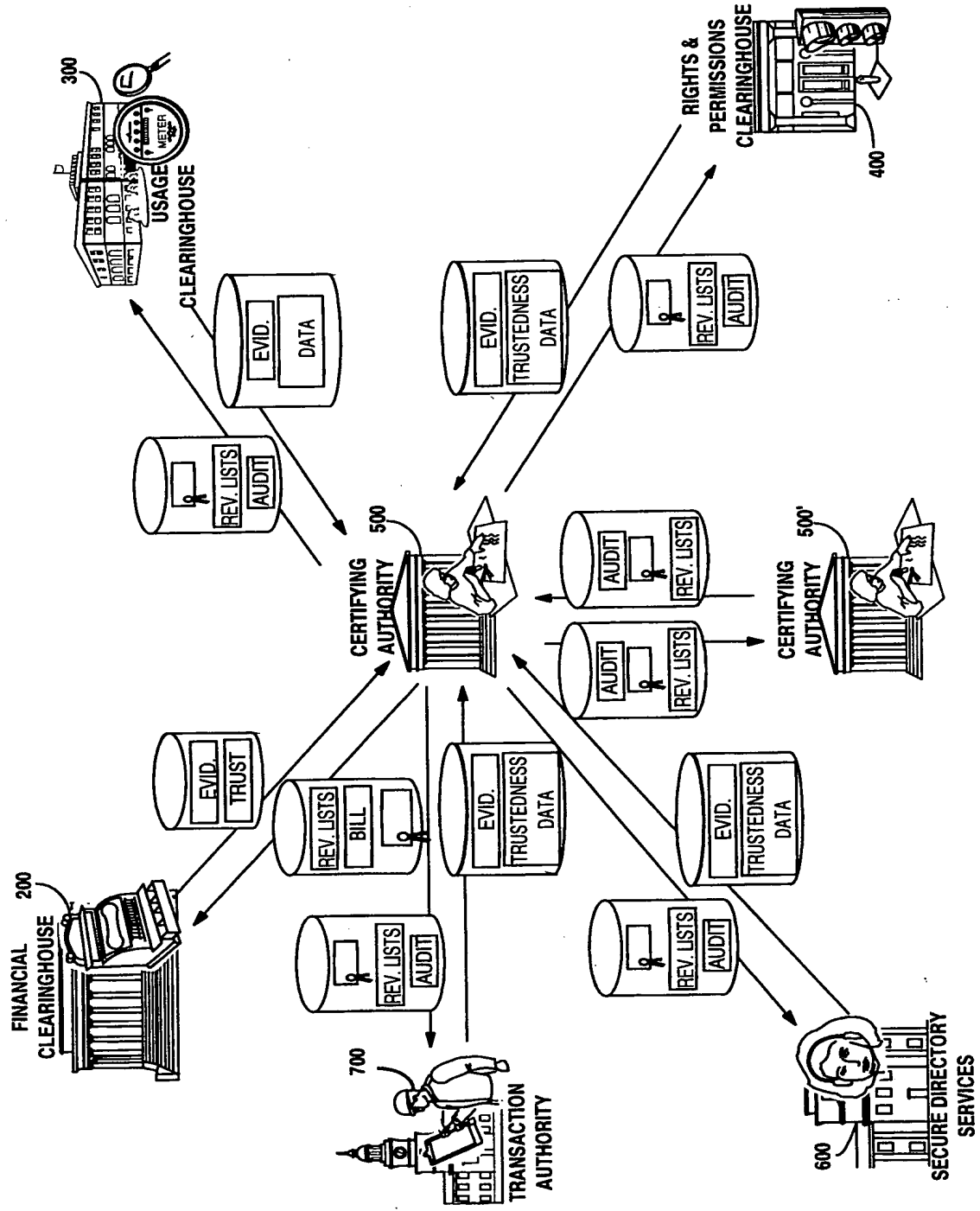


FIG. 16E

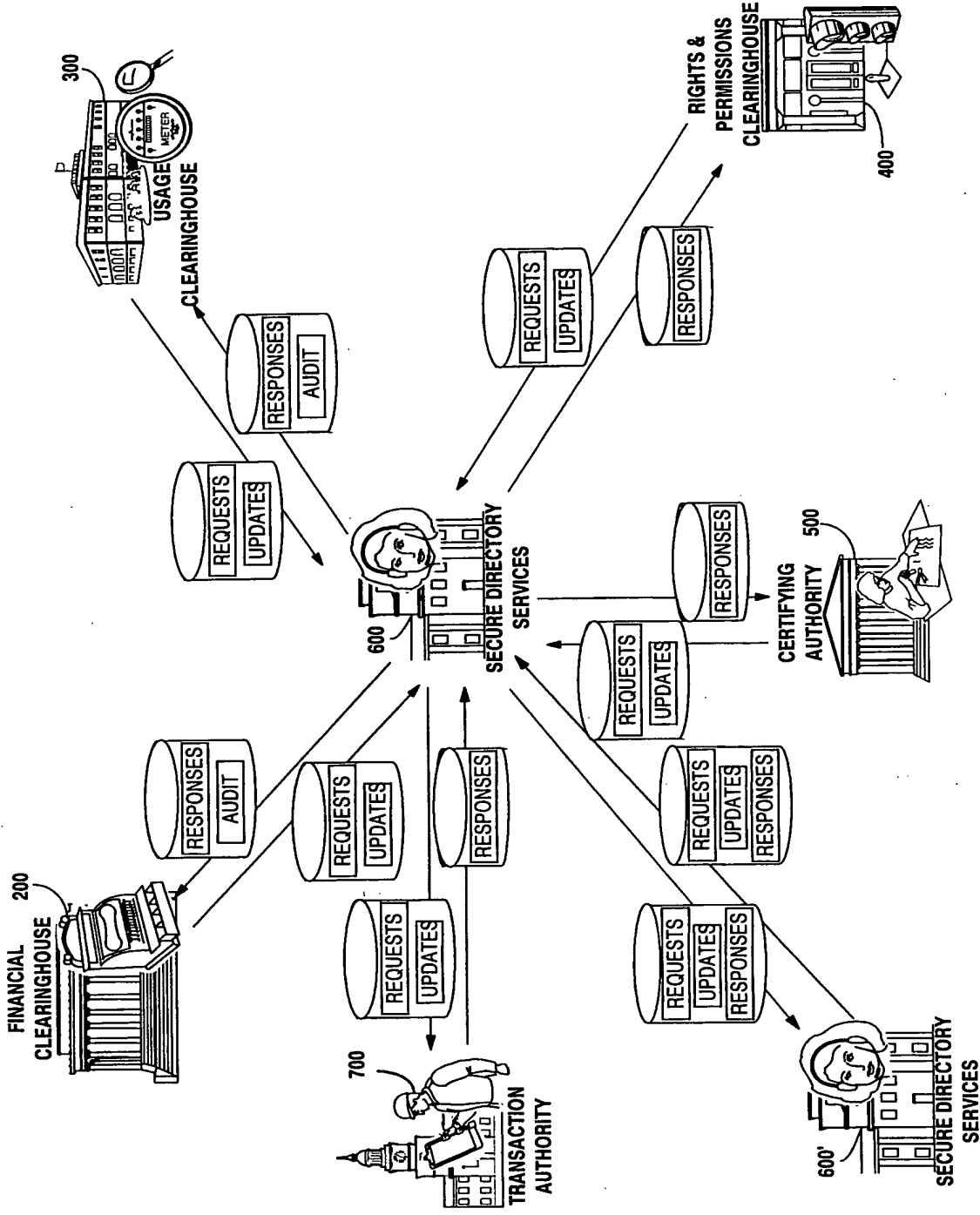
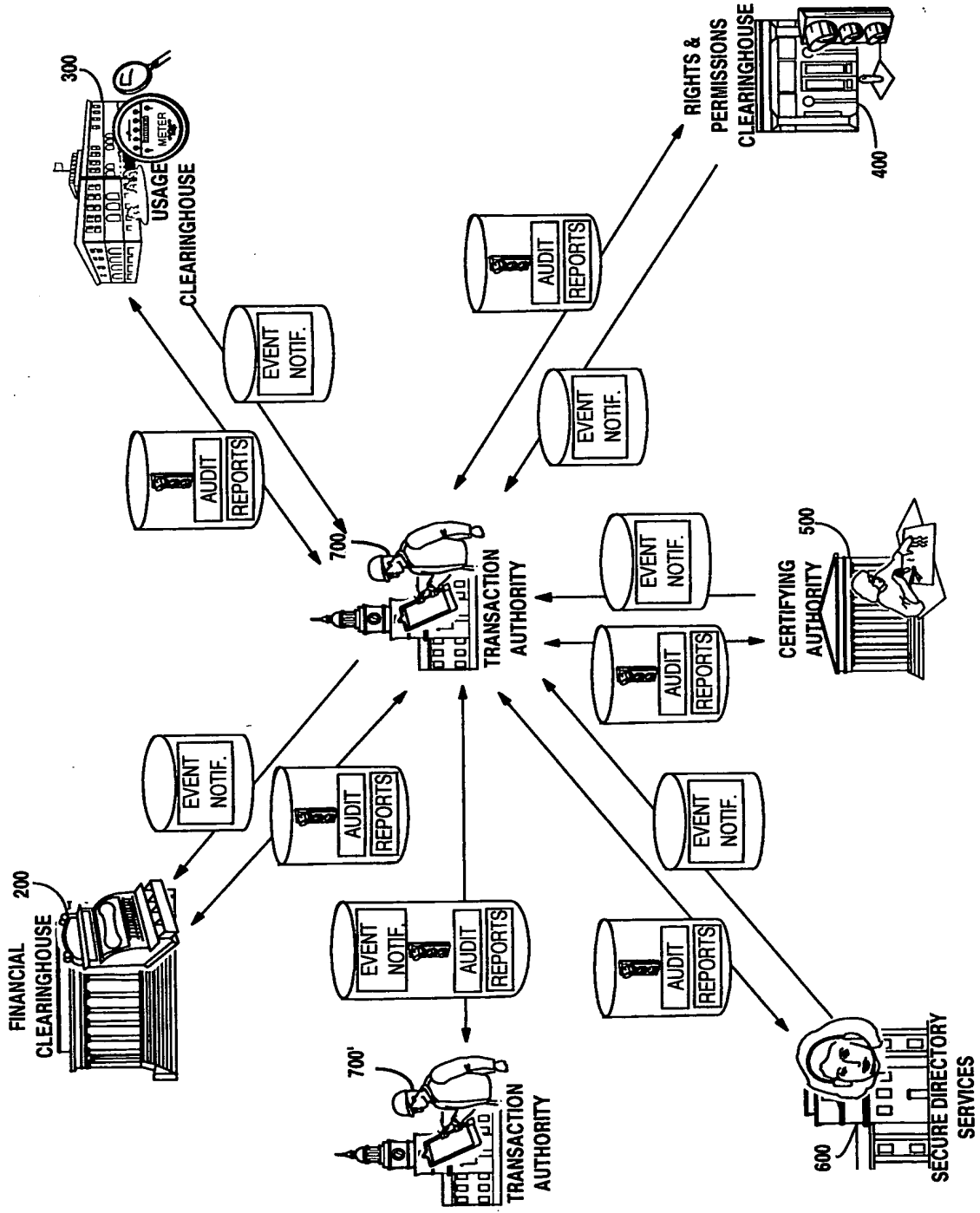


FIG. 16F



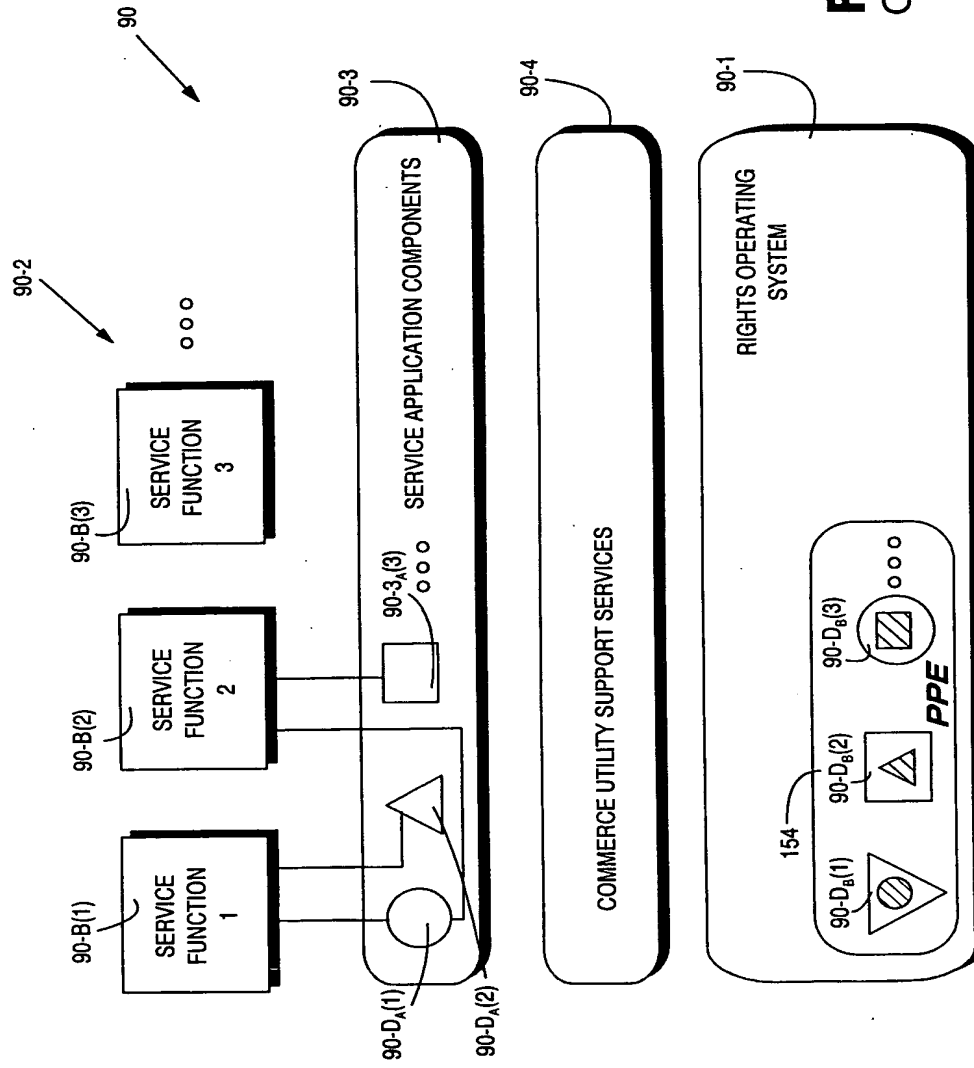


FIG. 17A
Commerce Utility System 90

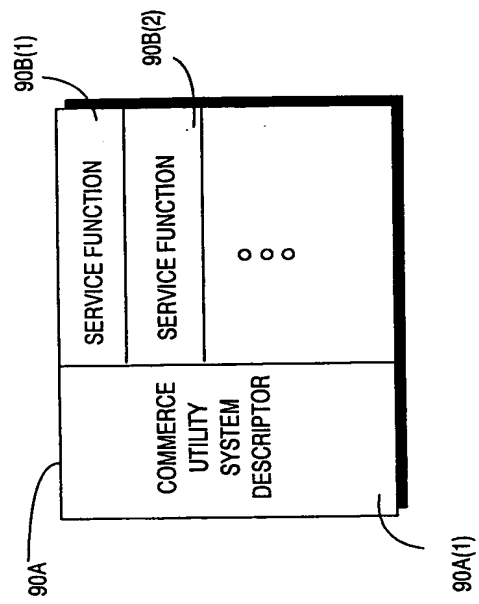


FIG. 17B

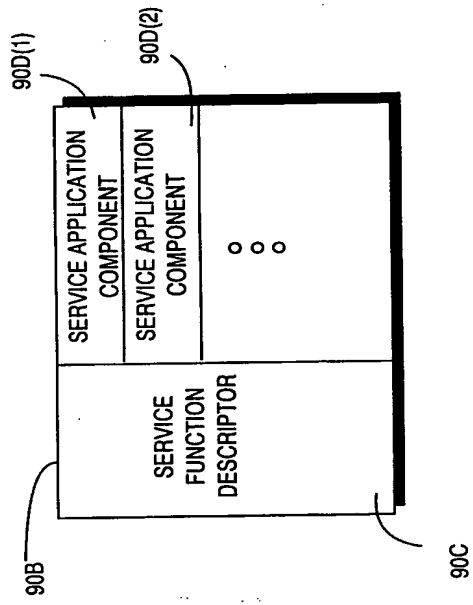


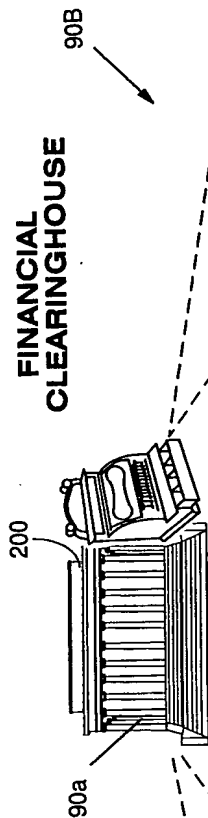
FIG. 17C

FIG. 17D-1

FINANCIAL CLEARINGHOUSE	USAGE CLEARINGHOUSE	RIGHTS & PERMISSIONS CLEARINGHOUSE	CERTIFICATE AUTHORITY	SECURE DIRECTORY SERVICES	TANGIBLES & PURCHASE & FULFILLMENT	INTANGIBLES & PURCHASE & FULFILLMENT	CONTRACT NEGOTIATIONS & EXECUTION	EDI	SECURE DOCUMENT DELIVERY	BUSINESS PROCESS INTEGRATION	ARBITRATION & MEDIATION	ELECTRONIC ORDERS	ELECTRONIC BANKING & CURRENCY MANAGEMENT	CYBERSPACE TRADING ENVIRONMENTS
AUDIT	MAINTAINING RECORDS	STATUS NOTIFICATION	EVENT DATABASE MANAGEMENT	CONTROL SET DATABASE MGMT	NOTARY	OBJECT IDENTIFIER ASSIGNMENT	REVOCACTION LIST MAINTENANCE	CERTIFICATE CREATION	...	...	...	...	...	...
OVERSEEING PROCESS	CONFIRMATIONS	ROUTING DATABASE	GENERATE CONTROL SETS	SEAL GENERATOR	DIGITAL TIME STAMP	COPYRIGHT REGISTRATION	...	...	...	...	...	...	...	...
MONITORING STATUS	UNCOMPLETED EVENTS RECORD	GENERATING REQUESTS	PROCESS CONTROL LOGIC	...	...	...	...	...	...	...	...	...	...	...
COMPLETE PROCESS DEFINITION	REQUIREMENTS GENERATION	REPLICATION	EVENT FLOW GENERATION	FINGERPRINT /WATERMARK	CONTROL SET	...	...	...	...	...	...	...	...	...
PROCESS CONTROL	REPORT GENERATION	PROPAGATION	ROUTING	OFFERS & COUNTER OFFERS	TEMPLATE REGISTRY	DIRECTOR DATABASE MANAGEMENT	...	...	...	...	...	...	...	...
INTERFACE(S) TO SETTLEMENT SERVICES	FUNDS TRANSFER	EVENT CONSEQUENCES	USAGE DATABASE MANAGEMENT	ARCHIVE	DATABASE QUERY & RESPONSE PROCESSING	...	...	...	...	...	...	...	...	...
CURRENCY CONVERSION	TAX CALCULATION & APPLICATION	ACCOUNT RECONCILIATION	BILL CREATION & PROCESSING	RIGHTS & PERMISSION DATABASE MANAGEMENT	ADVERTISING DATABASE MANAGEMENT	...	...	...	...	...	...	...	...	...
ACCOUNT CREATION & IDENTIFIER ASSIGNMENT	PAYMENT AGGREGATION	IDENTITY AUTHENTICATION	MARKET RESEARCH	TEMPLATE DATABASE MANAGEMENT	AUTOMATIC CLASS GENERATION	...	...	...	...	...	...	...	...	...
PAYMENT DISAGGREGATION	BUDGET PRE-AUTHORIZATION	ELECTRONIC CURRENCY CREATION	NEGOTIATION	COMMERCE MGMT LANGUAGE PROCESSING	AUTOMATIC CLASS ASSIGNMENT	...	...	...	...	...	...	...	...	...
:	:	:	RIGHTS MANAGEMENT LANGUAGE PROCESSING	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

90B

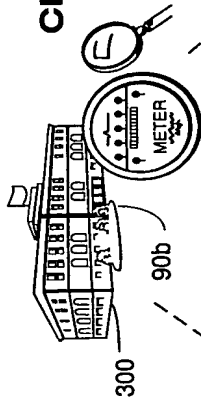
FIG. 17D-2



AUDIT	MAINTAINING RECORDS	STATUS NOTIFICATION	EVENT DATABASE MANAGEMENT	CONTROL SET DATABASE MGMT	NOTARY	OBJECT REGISTRY	CERTIFICATE CREATION	...
OVERSEEING PROCESS	CONFIRMATIONS	ROUTING DATABASE	GENERATE CONTROL SETS	SEAL GENERATOR	OBJECT IDENTIFIER ASSIGNMENT	REVOCATION LIST MAINTENANCE	...	...
MONITORING STATUS	UNCOMPLETED EVENTS RECORD	GENERATING REQUESTS	PROCESS CONTROL LOGIC	DIGITAL TIME STAMP	COPYRIGHT REGISTRATION	...	...	...
COMPLETE PROCESS DEFINITION	REQUIREMENTS GENERATION	REPLICATION	EVENT FLOW GENERATION	FINGERPRINT /WATERMARK	CONTROL SET REGISTRY	...	...	...
PROCESS CONTROL	REPORT GENERATION	PROPAGATION	ROUTING	OFFERS & COUNTER OFFERS	TEMPLATE REGISTRY	DIRECTOR DATABASE MANAGEMENT	...	...
INTERFACE(S) TO SETTLEMENT SERVICES	FUNDS TRANSFER	EVENT CONSEQUENCES	USAGE DATABASE MANAGEMENT	ARCHIVE	DATABASE QUERY & RESPONSE PROCESSING	...	...	...
CURRENCY CONVERSION	TAX CALCULATION & APPLICATION	ACCOUNT RECONCILIATION	BILL CREATION & PROCESSING	RIGHTS & PERMISSION DATABASE MANAGEMENT	ADVERTISING DATABASE MANAGEMENT	...	...	...
ACCOUNT CREATION & IDENTIFIER ASSIGNMENT	PAYMENT AGGREGATION	IDENTITY AUTHENTICATION	MARKET RESEARCH	TEMPLATE DATABASE MANAGEMENT	AUTOMATIC CLASS GENERATION	...	...	...
PAYMENT DISAGGREGATION	BUDGET PRE-AUTHORIZATION	ELECTRONIC CURRENCY CREATION	NEGOTIATION	COMMERCE MGMT LANGUAGE PROCESSING	AUTOMATIC CLASS ASSIGNMENT	...	...	...
:	:	:	RIGHTS MANAGEMENT LANGUAGE PROCESSING	:	:	:	:	:

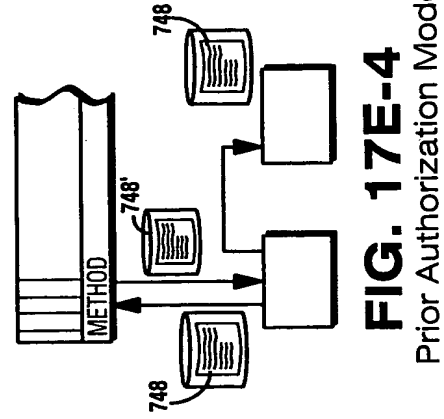
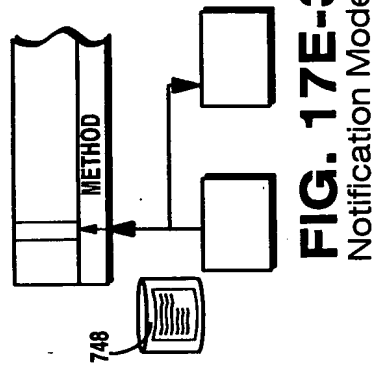
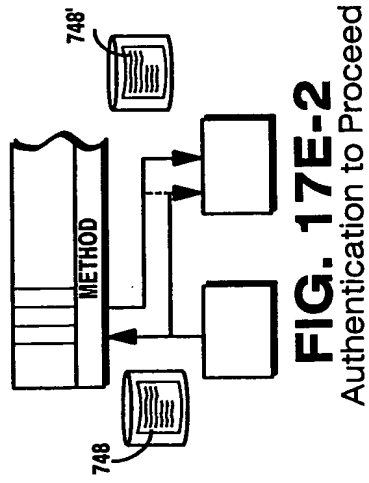
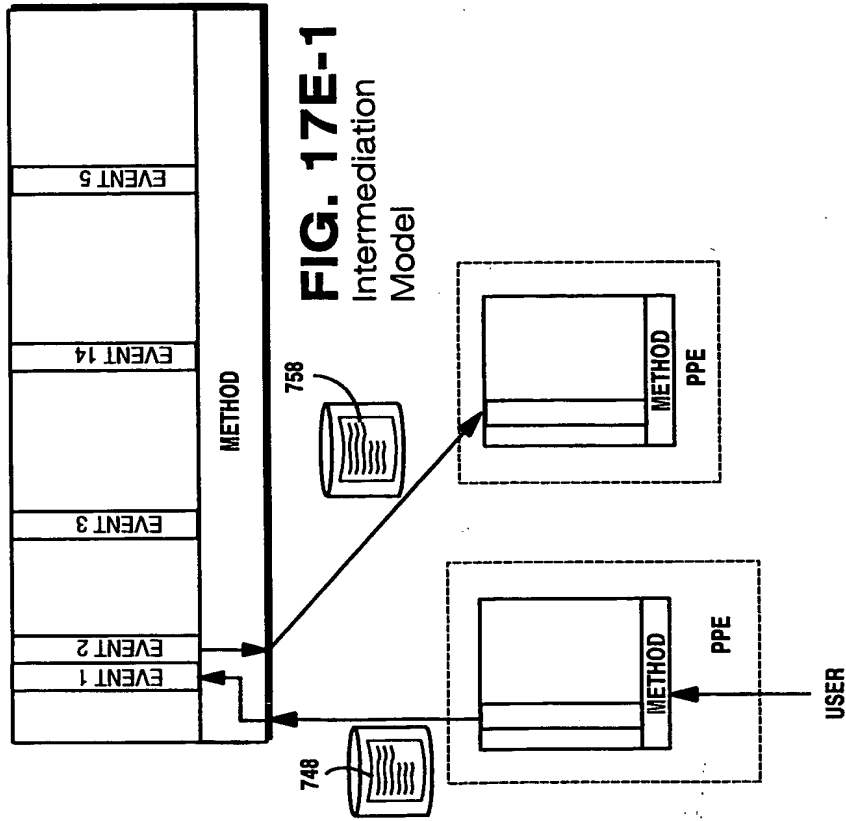
FIG. 17D-3

USAGE
CLEARINGHOUSE



90B

AUDIT	MAINTAINING RECORDS	STATUS NOTIFICATION	EVENT DATABASE MANAGEMENT	CONTROL SET DATABASE MGMT	NOTARY	OBJECT REGISTRY	CERTIFICATE CREATION	...
OVERSEEING PROCESS	CONFIRMATIONS	ROUTING DATABASE	GENERATE CONTROL SETS	SEAL GENERATOR	OBJECT IDENTIFIER ASSIGNMENT	REVOCATION LIST MAINTENANCE	...	...
MONITORING STATUS	UNCOMPLETED EVENTS RECORD	GENERATING REQUESTS	PROCESS CONTROL LOGIC	DIGITAL TIME STAMP	COPYRIGHT REGISTRATION	...	...	...
COMPLETE PROCESS DEFINITION	REQUIREMENTS GENERATION	REPLICATION	EVENT FLOW GENERATION	FINGERPRINT /WATERMARK	CONTROL SET REGISTRY	...	...	...
PROCESS CONTROL	REPORT GENERATION	PROPAGATION	ROUTING	OFFERS & COUNTER OFFERS	TEMPLATE REGISTRY	DIRECTOR DATABASE MANAGEMENT	...	...
INTERFACE(S) TO SETTLEMENT SERVICES	FUNDS TRANSFER	EVENT CONSEQUENCES	USAGE DATABASE MANAGEMENT	ARCHIVE	DATABASE QUERY & RESPONSE PROCESSING	...	...	...
CURRENCY CONVERSION	TAX CALCULATION & APPLICATION	ACCOUNT RECONCILIATION	BILL CREATION & PROCESSING	RIGHTS & PERMISSION DATABASE MANAGEMENT	ADVERTISING DATABASE MANAGEMENT	...	...	...
ACCOUNT CREATION & IDENTIFIER ASSIGNMENT	PAYMENT AGGREGATION	IDENTITY AUTHENTICATION	MARKET RESEARCH	TEMPLATE DATABASE MANAGEMENT	AUTOMATIC CLASS GENERATION	...	...	...
PAYMENT DISAGGREGATION	BUDGET PRE-AUTHORIZATION	ELECTRONIC CURRENCY CREATION	NEGOTIATION	COMMERCE MGMT LANGUAGE PROCESSING	AUTOMATIC CLASS ASSIGNMENT	...	...	...
...	...	...	RIGHTS MANAGEMENT LANGUAGE PROCESSING	...	...	...	...	...



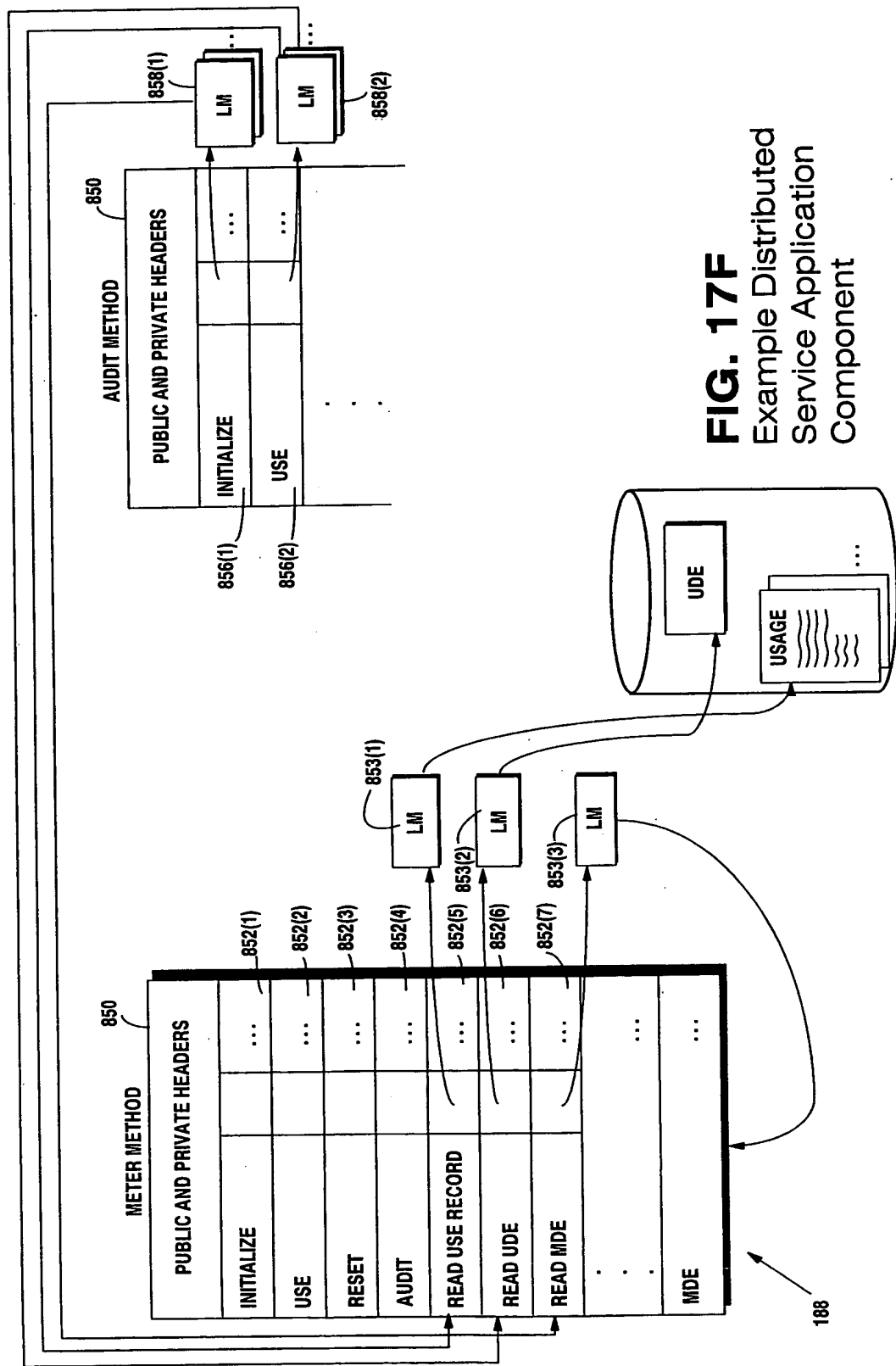


FIG. 17F
Example Distributed
Service Application
Component

FIG. 18
Example Financial
Clearinghouse

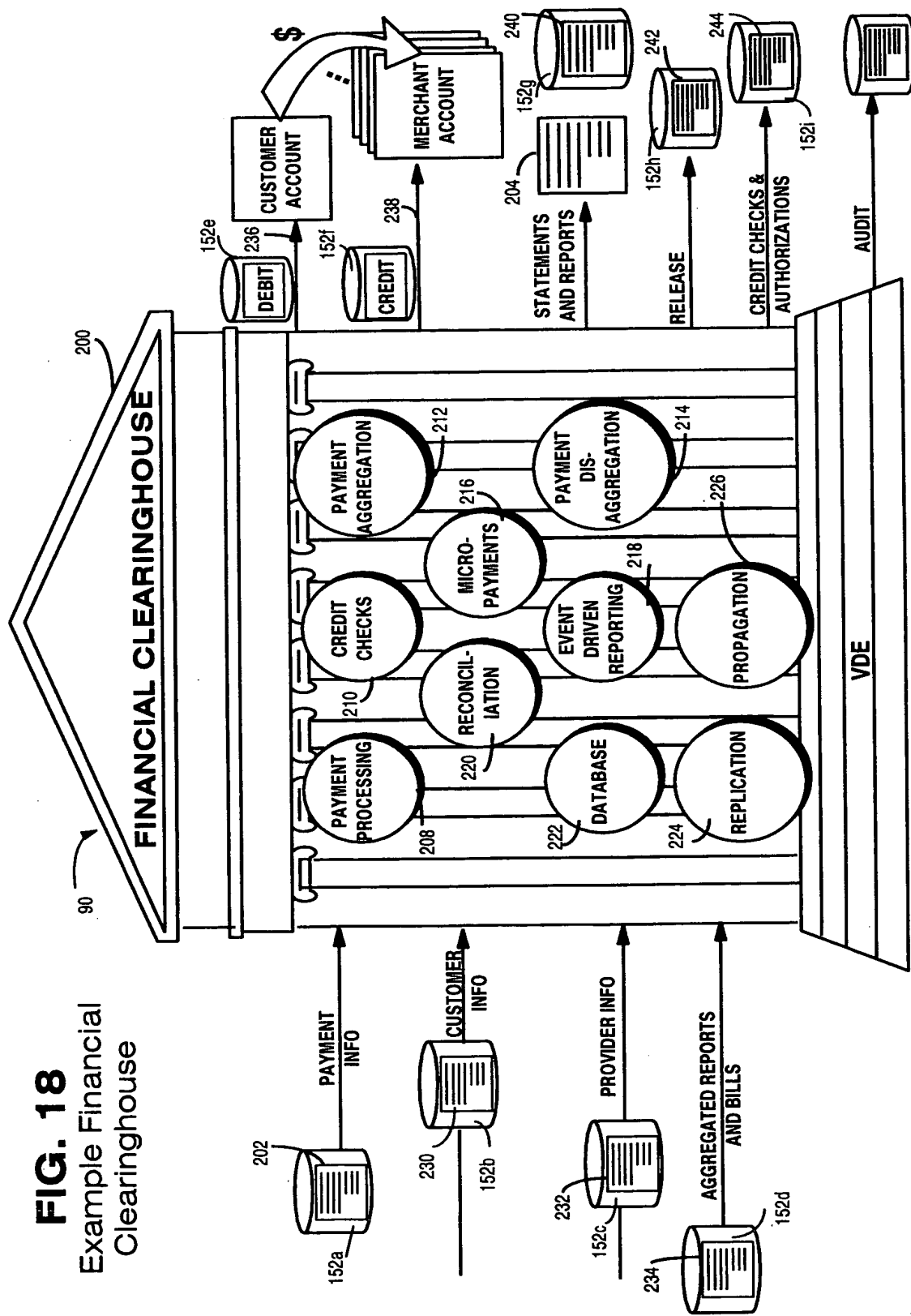


FIG. 19
Example Financial
Clearinghouse
Arrangement

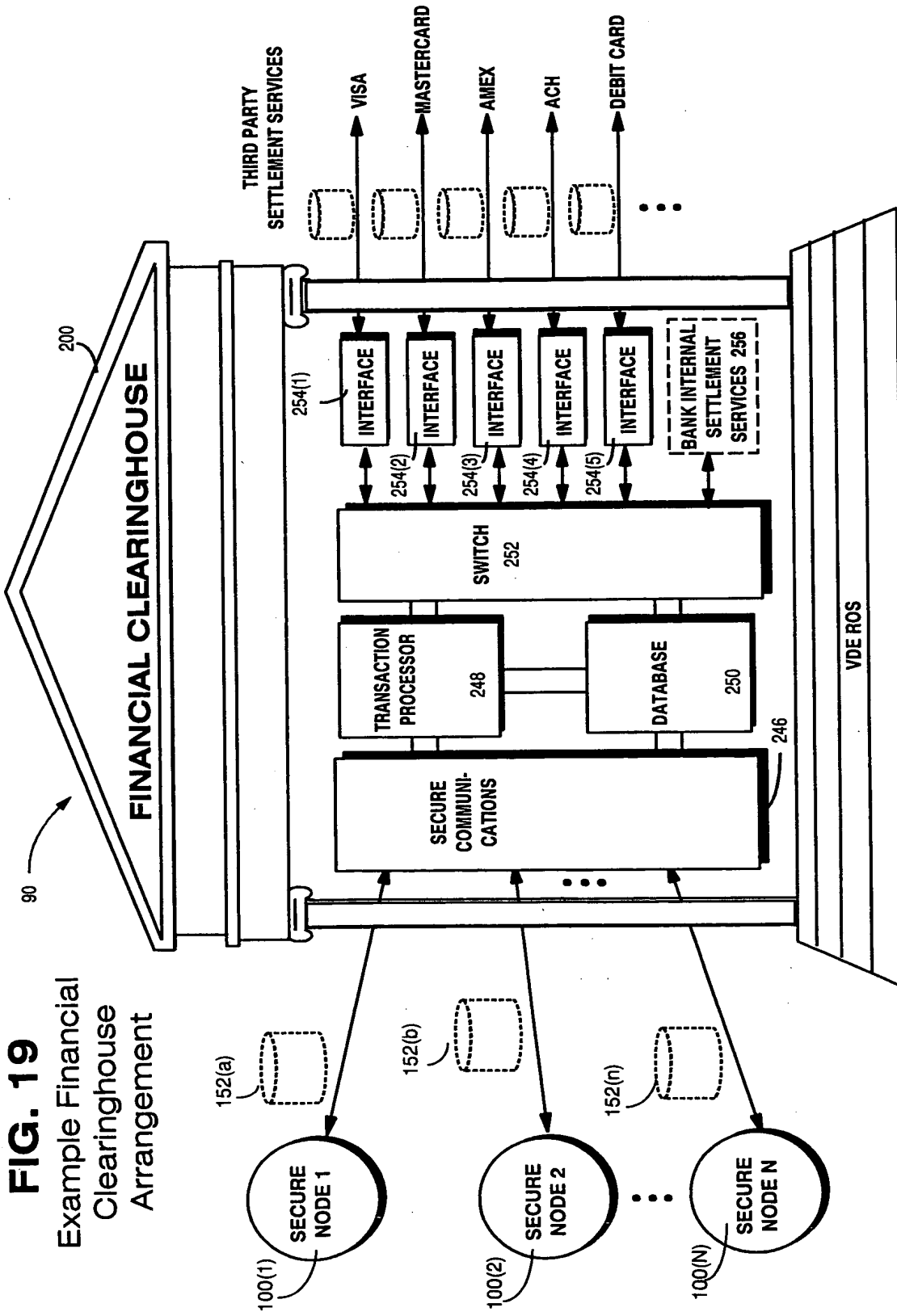
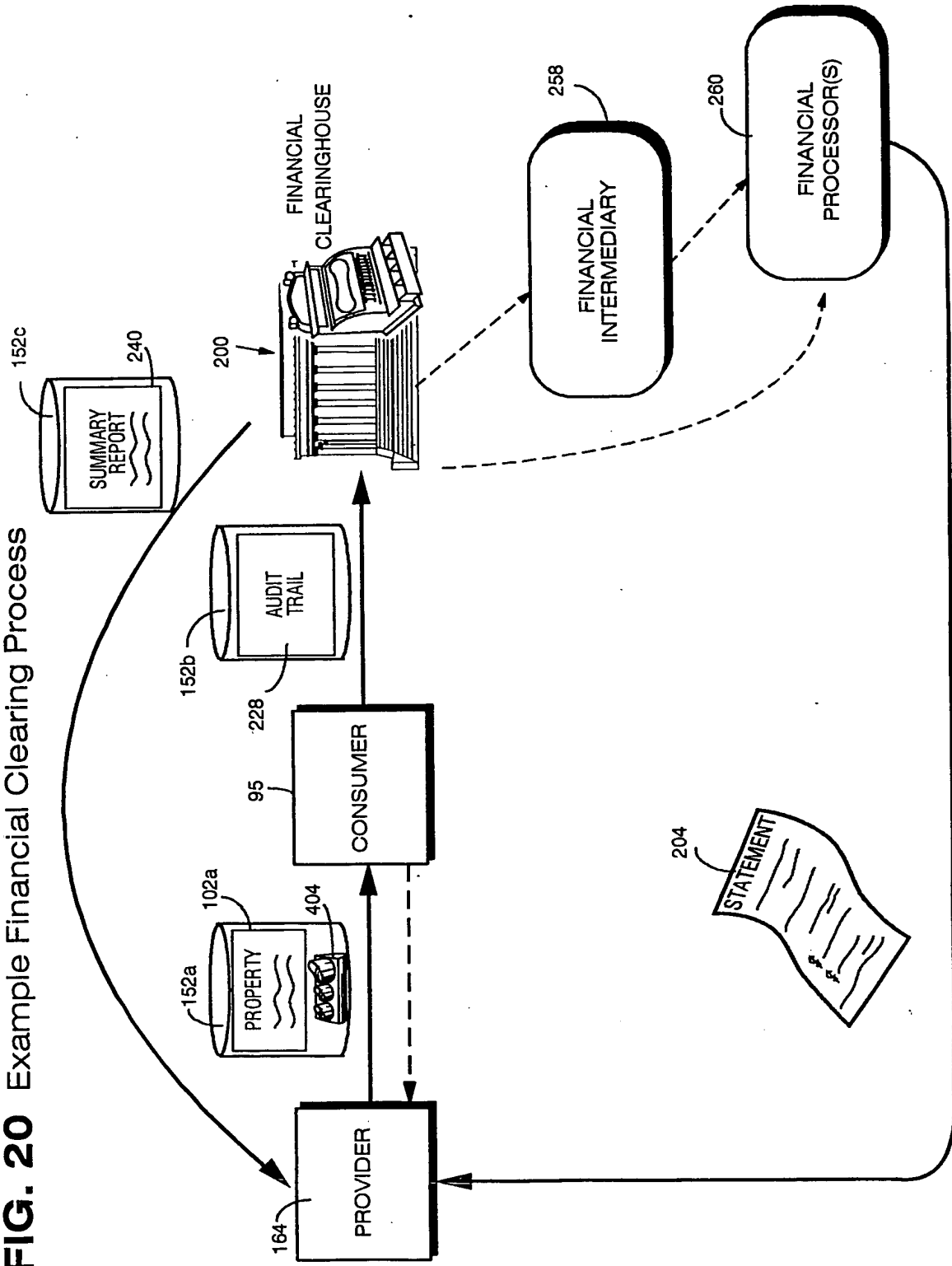


FIG. 20 Example Financial Clearing Process



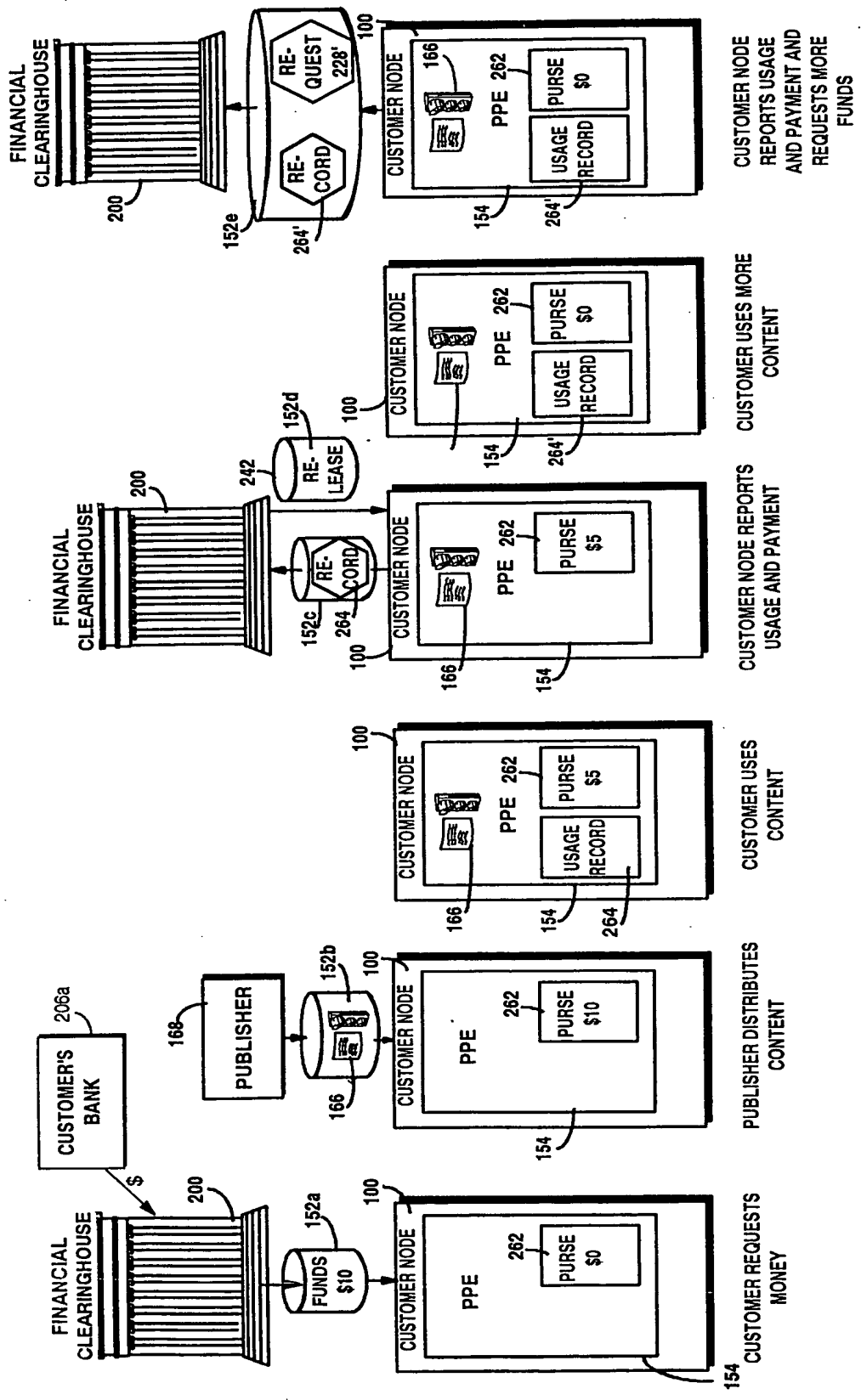


FIG. 20A **FIG. 20B** **FIG. 20C** **FIG. 20D** **FIG. 20E** **FIG. 20F**

EXAMPLE FINANCIAL CLEARING ACTIVITIES

CONTENT CREATOR

CONTENT PUBLISHER

CONTENT CONSUMER

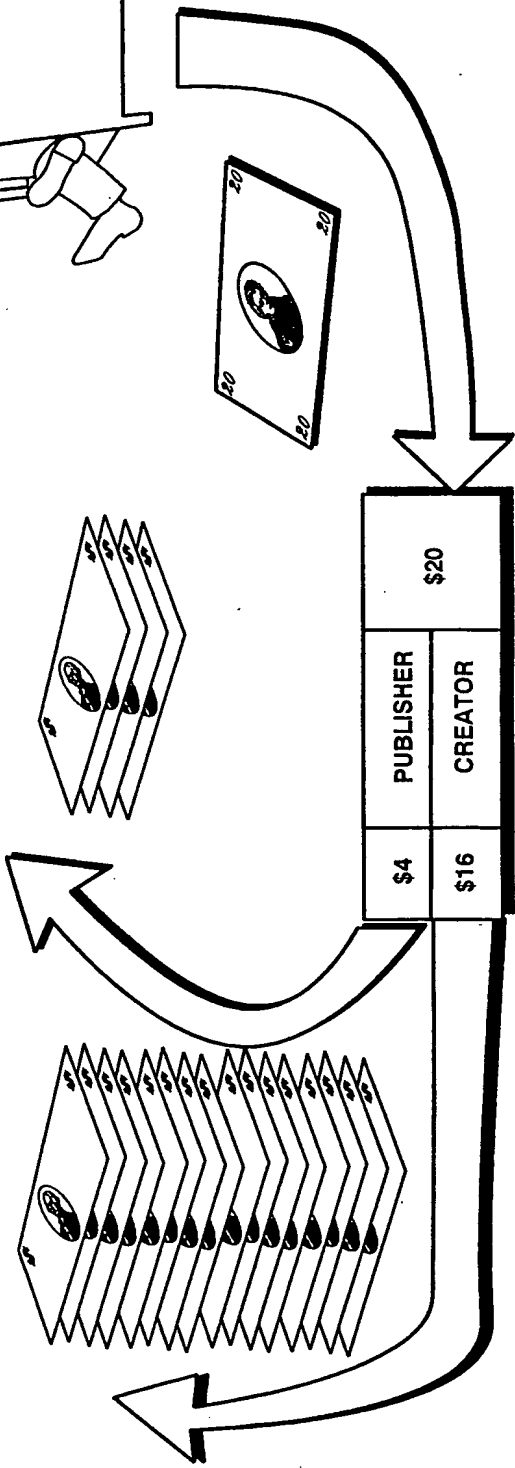
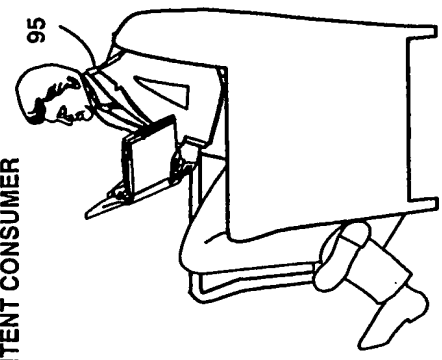
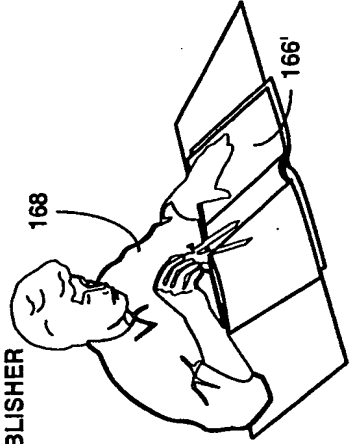
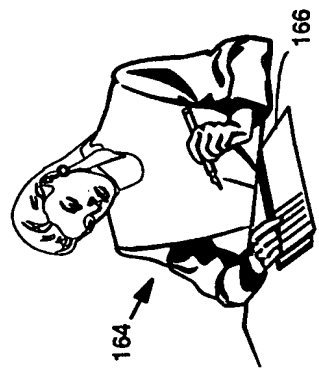


FIG. 21 Example Payment Disaggregation

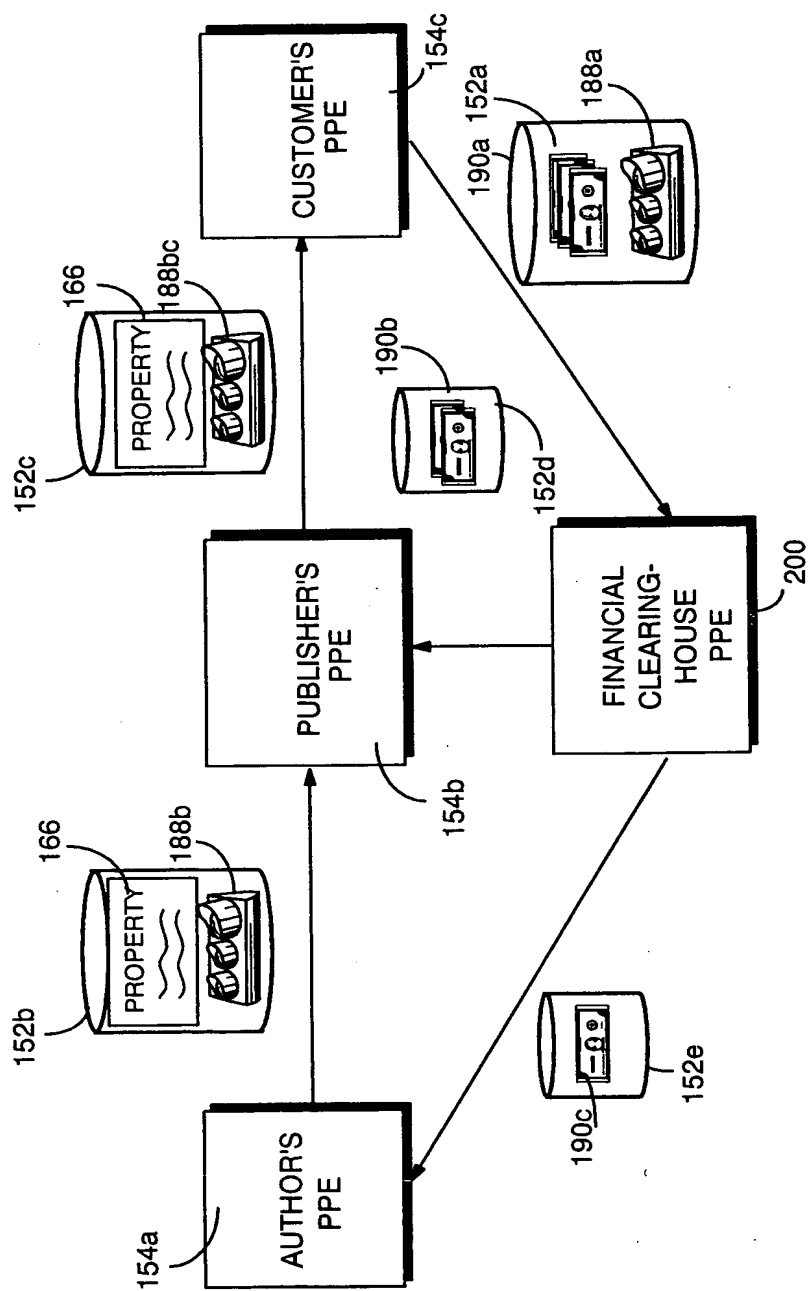


FIG. 22 PAYMENT AND REDISTRIBUTION EXAMPLE

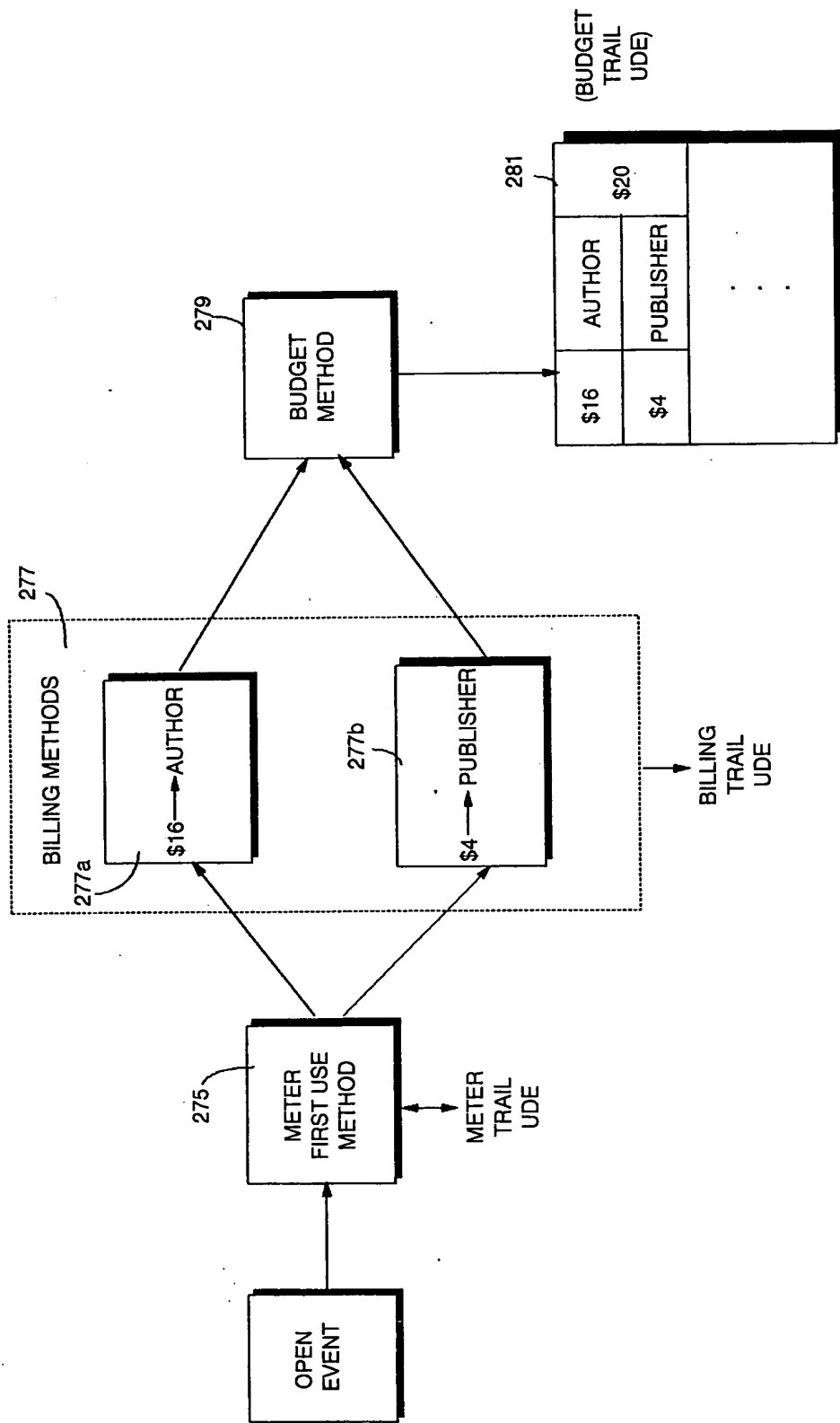


FIG. 22A User Node Disaggregation Example

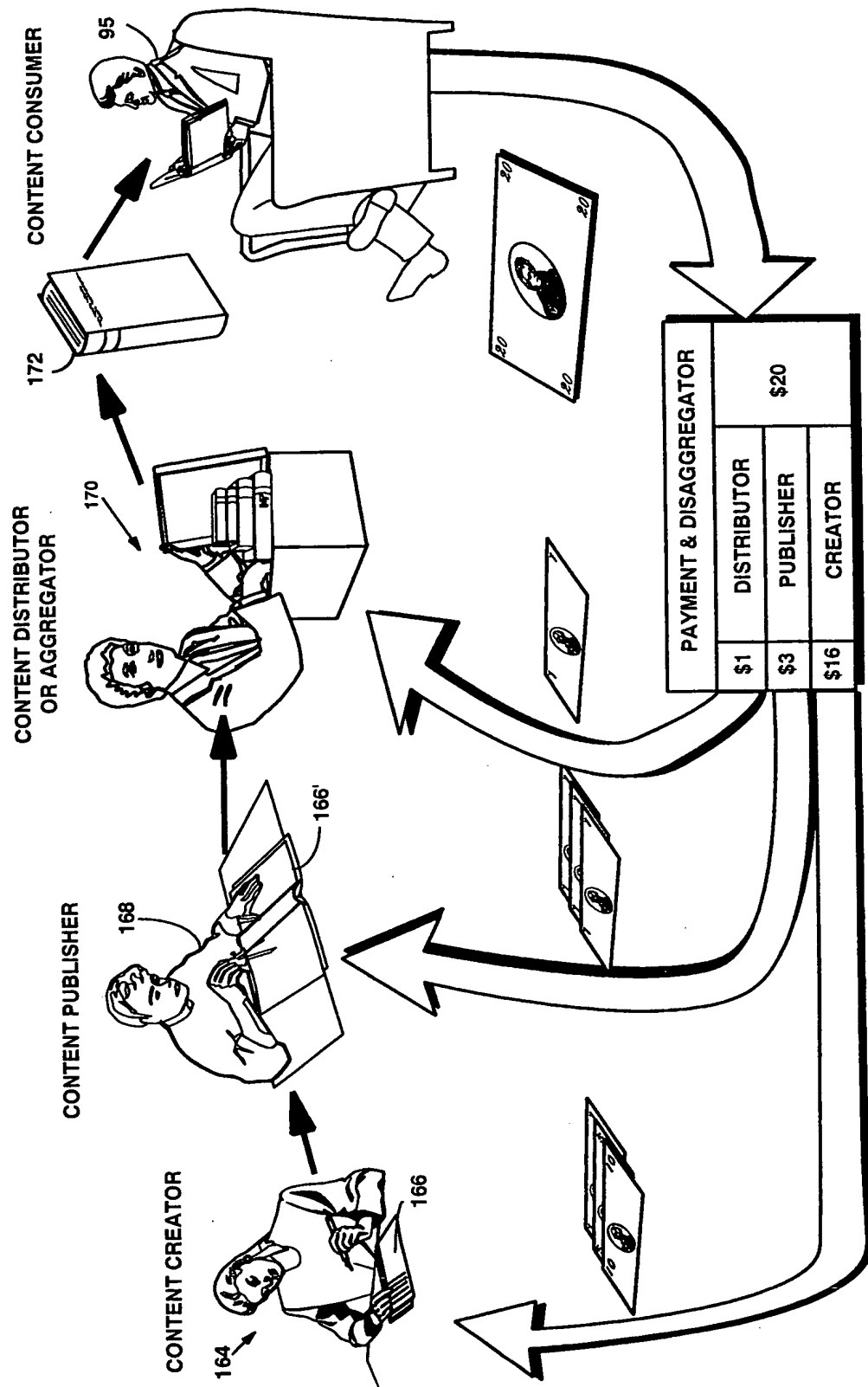
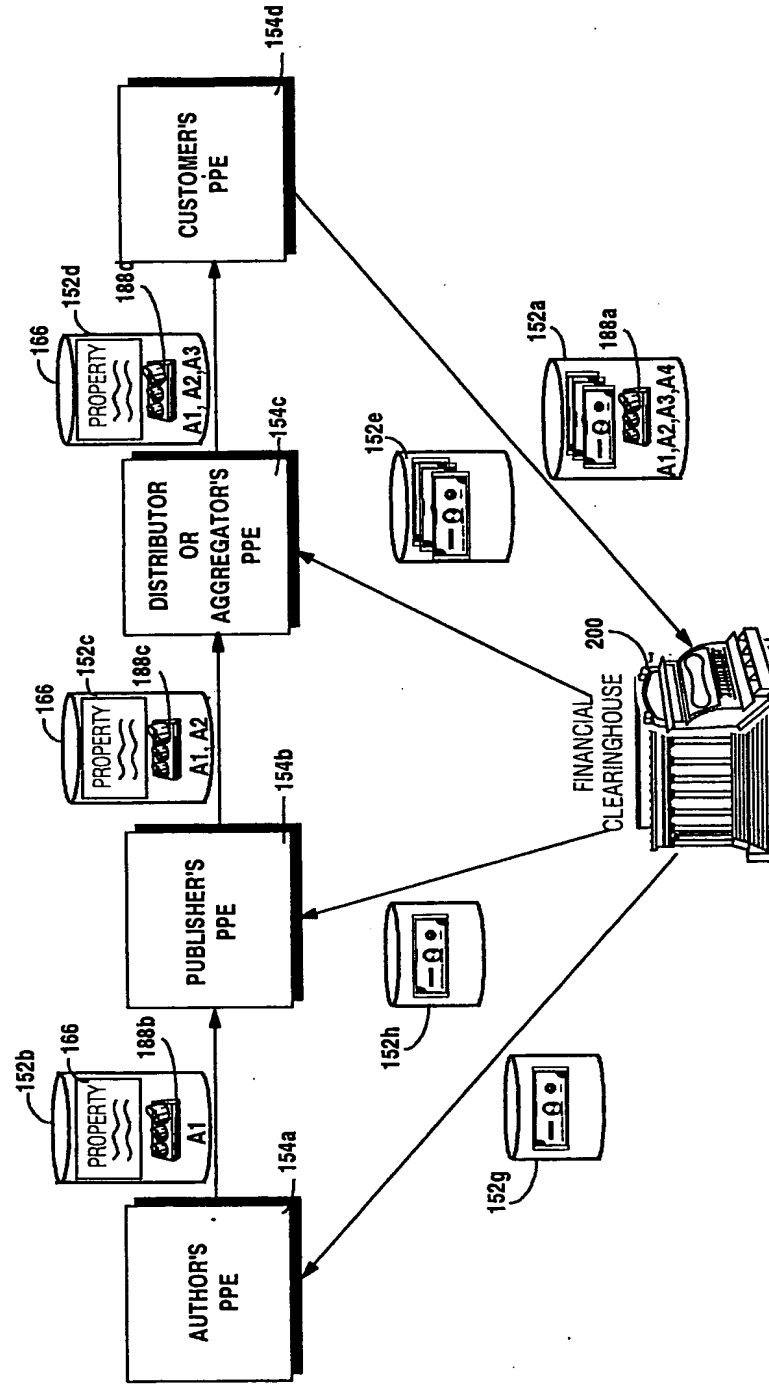


FIG. 23 Payment Disaggregation

FIG. 24
EXAMPLE PAYMENT
AND REDISTRIBUTION
SCENARIO



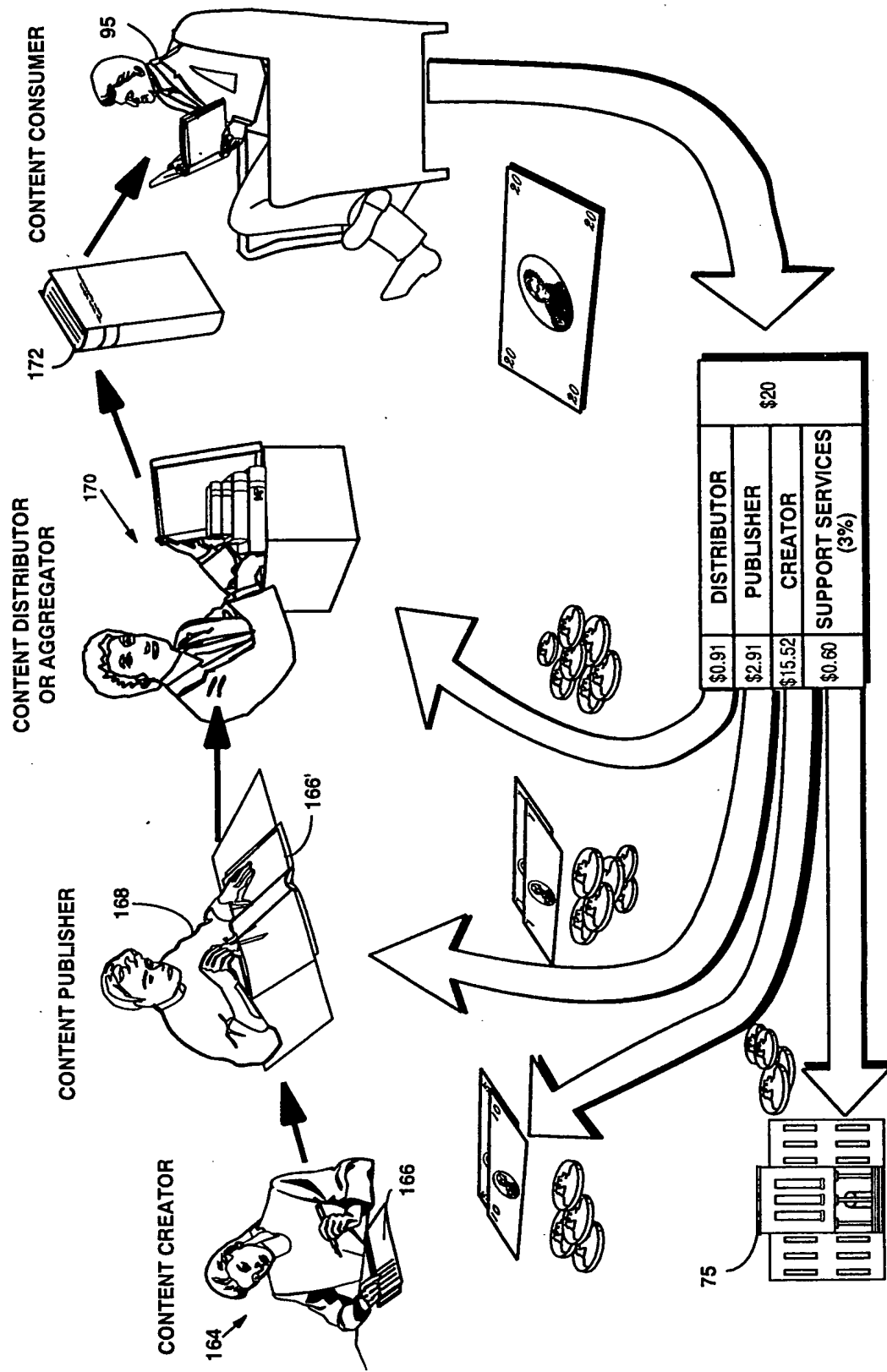


FIG. 25 Example Payment Disaggregation

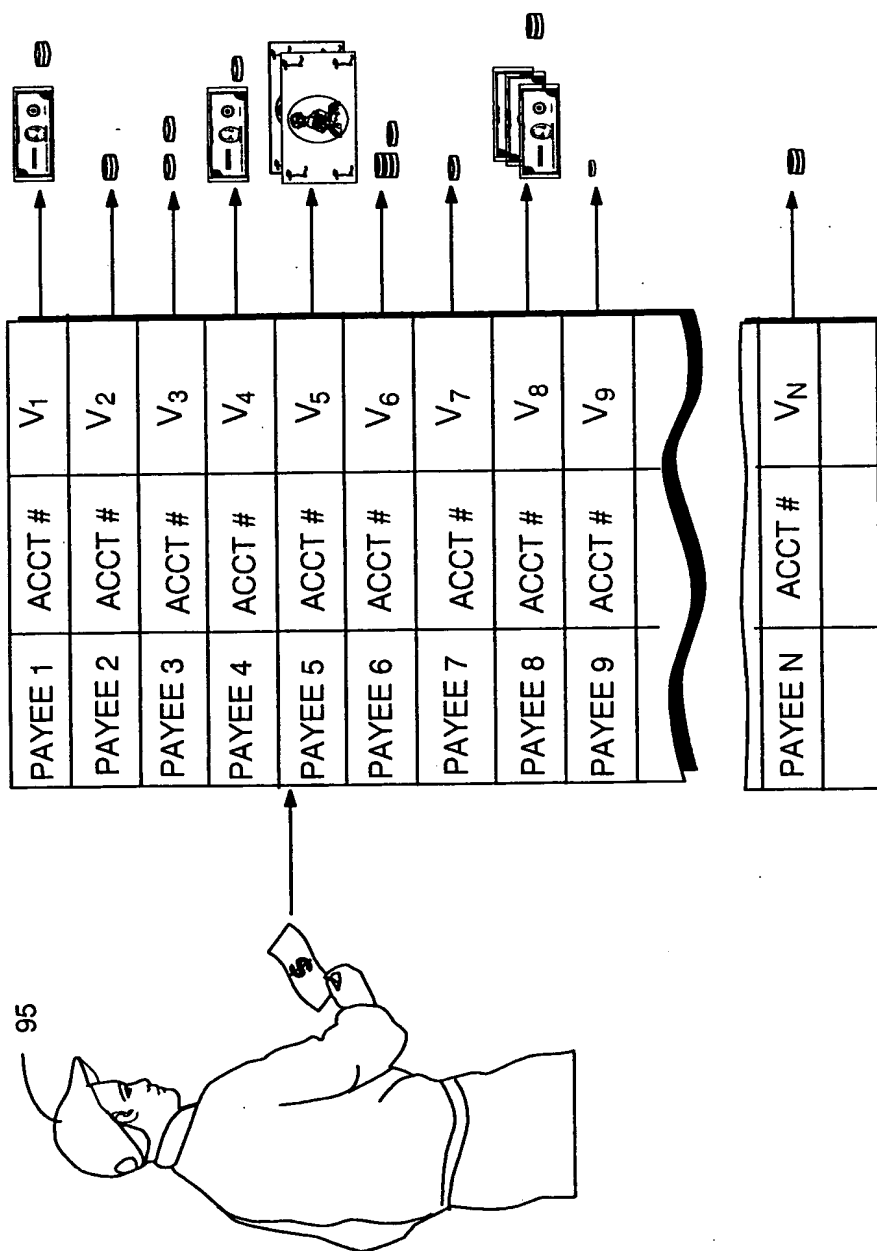


FIG. 26 PAYMENT DISAGGREGATION

FIG. 27
Example Payment and
Redistribution Scenario

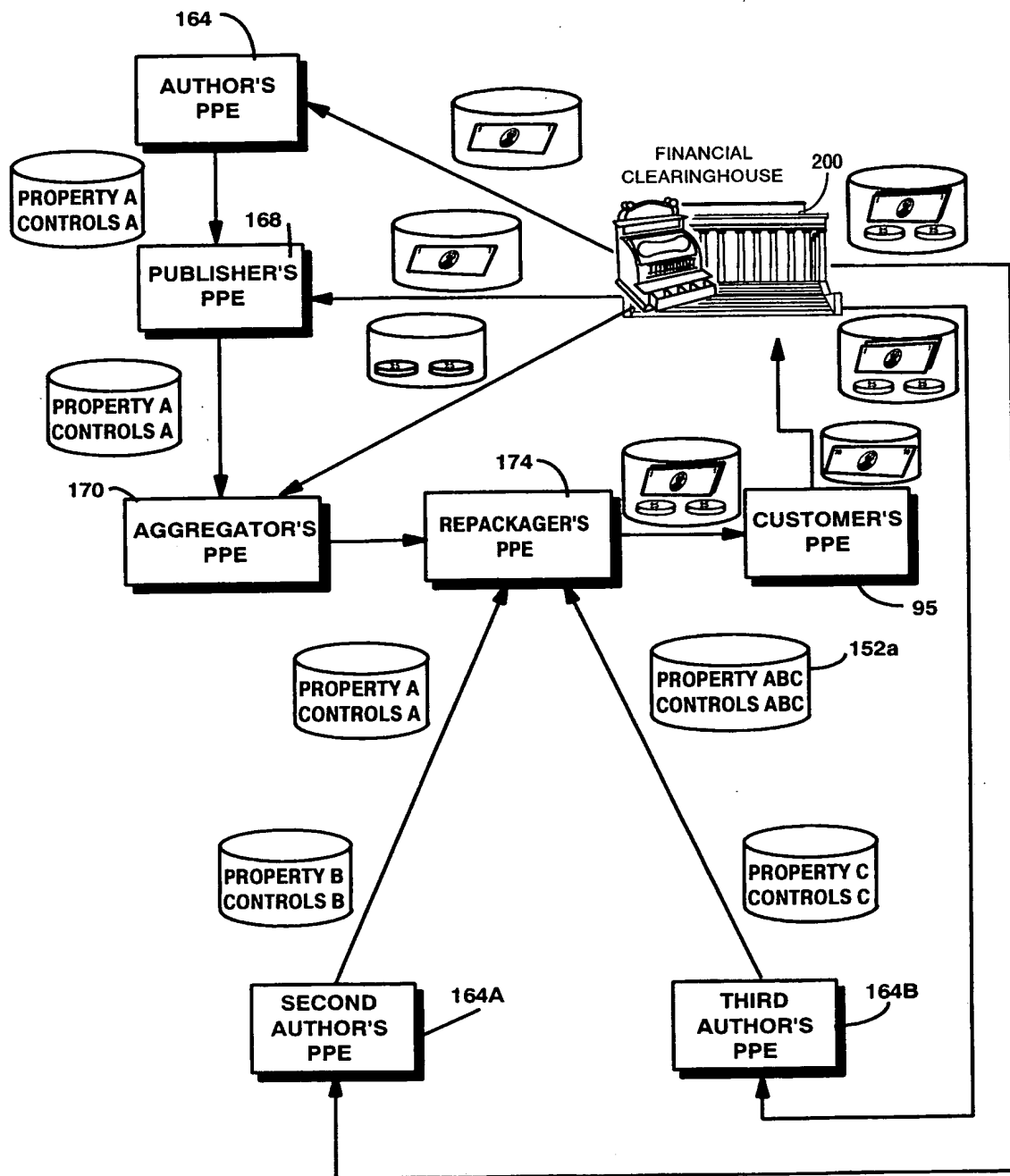
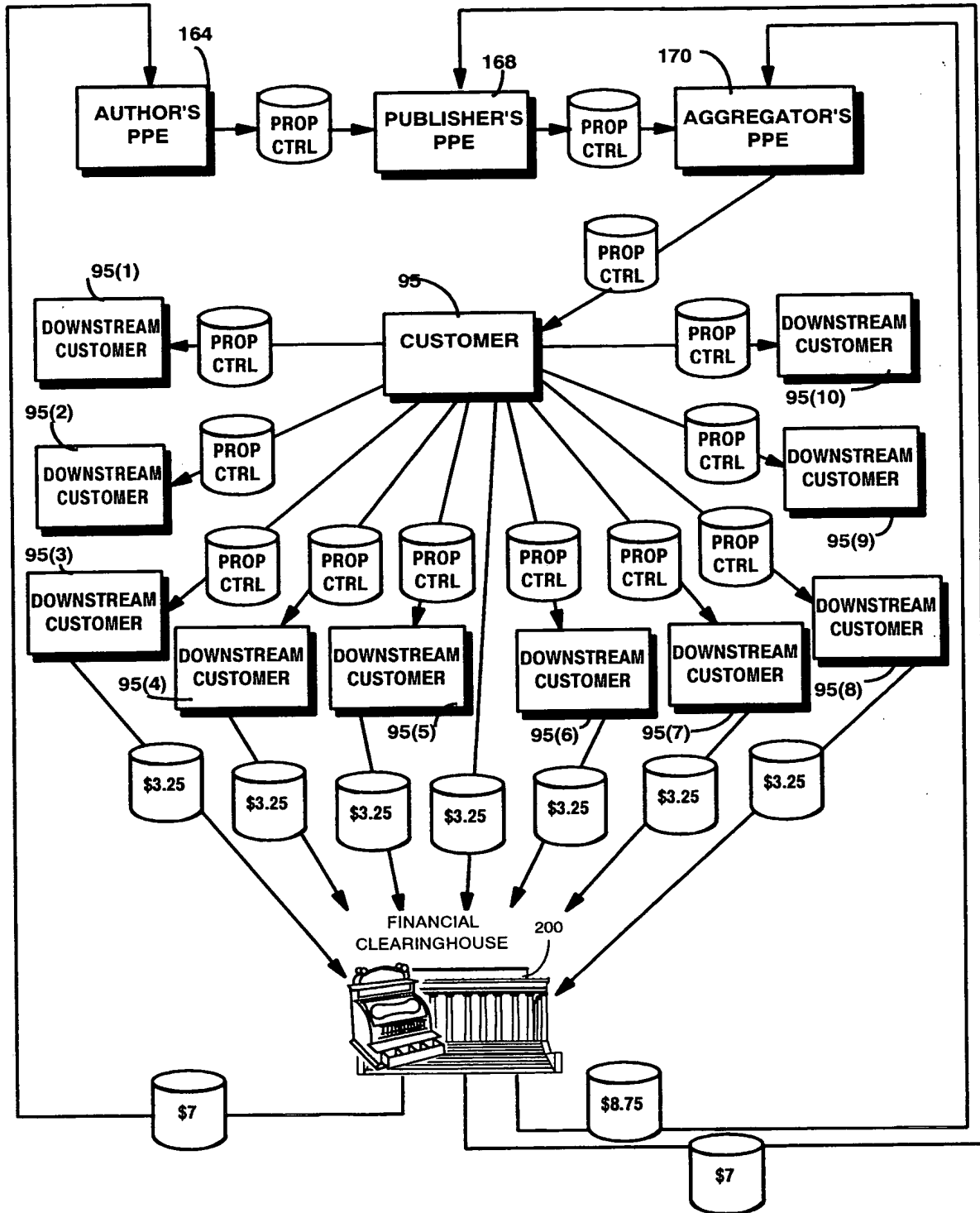


FIG. 28 Example Super Distribution



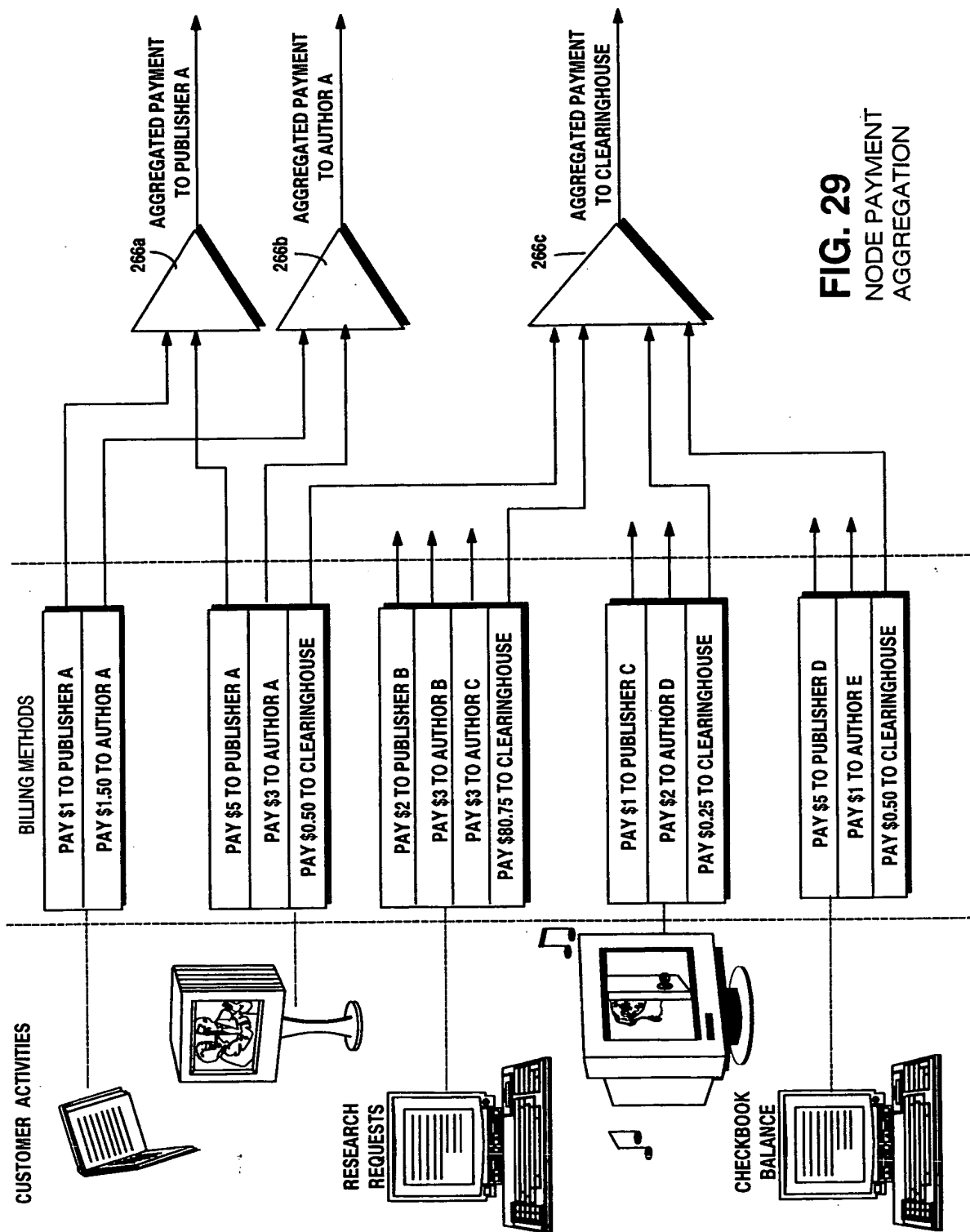


FIG. 29
NODE PAYMENT
AGGREGATION

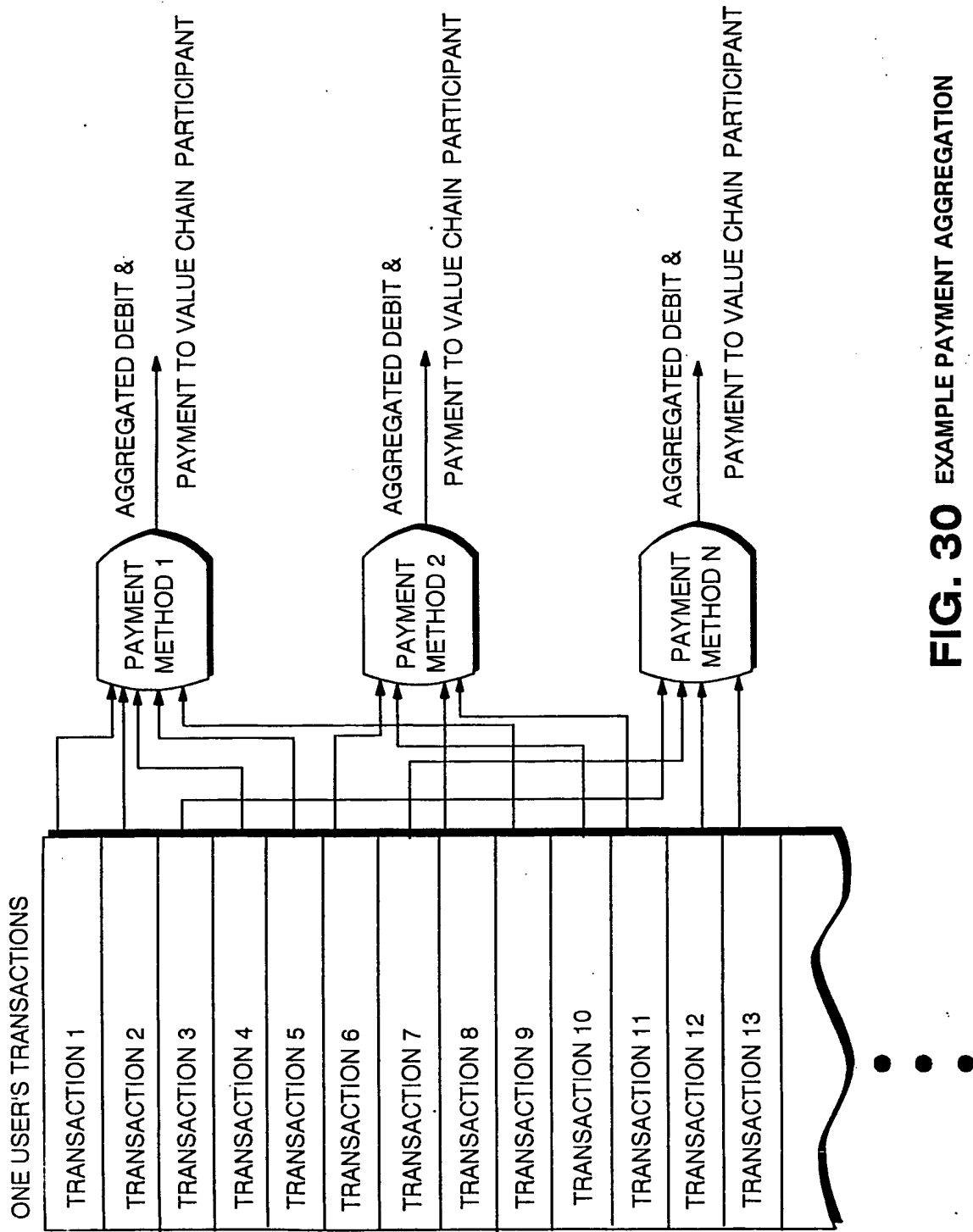


FIG. 30 EXAMPLE PAYMENT AGGREGATION

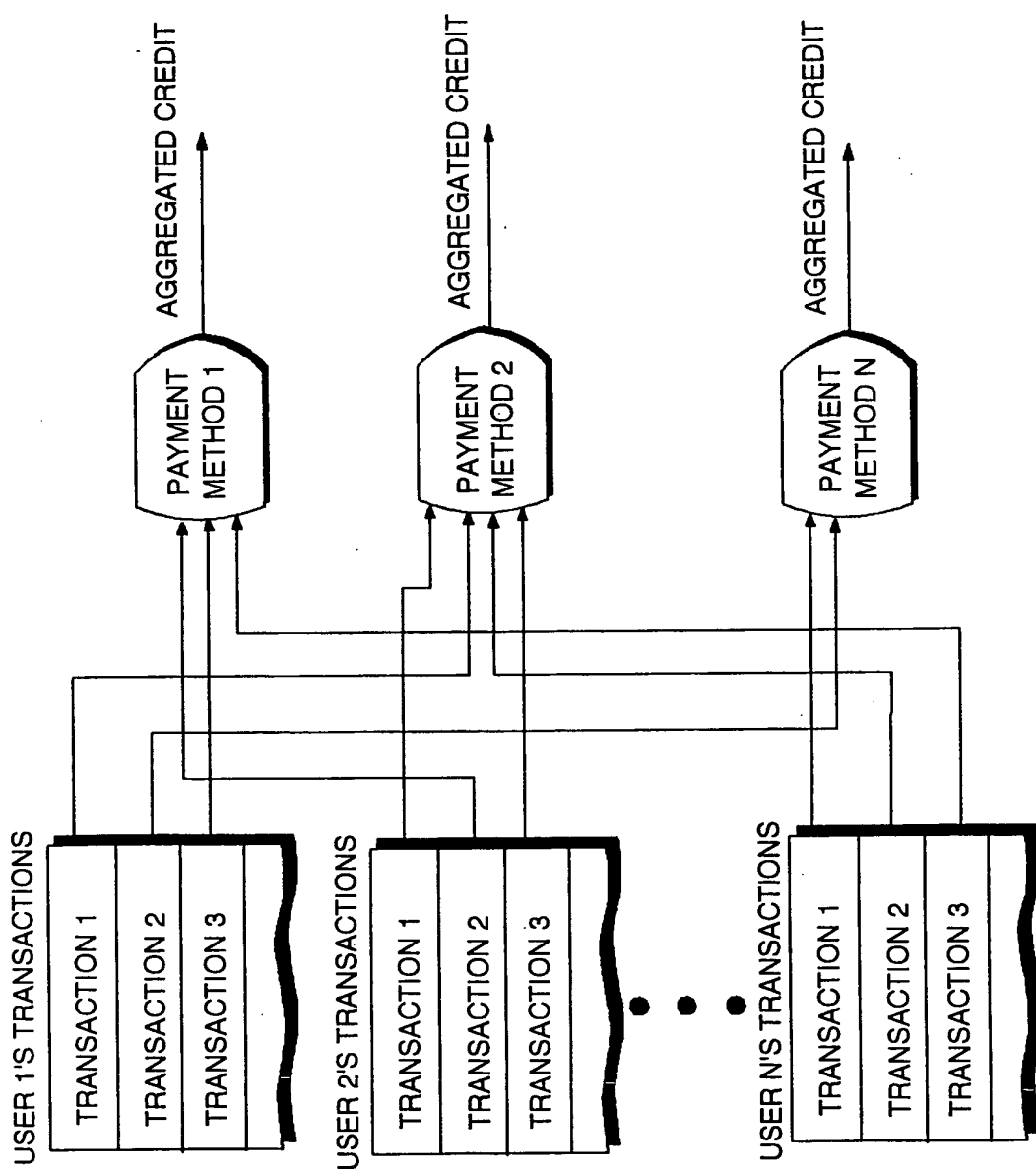


FIG. 31 Financial Clearinghouse
Example Payment Aggregation

FIG. 32 EXAMPLE FINANCIAL CLEARINGHOUSE ARRANGEMENT

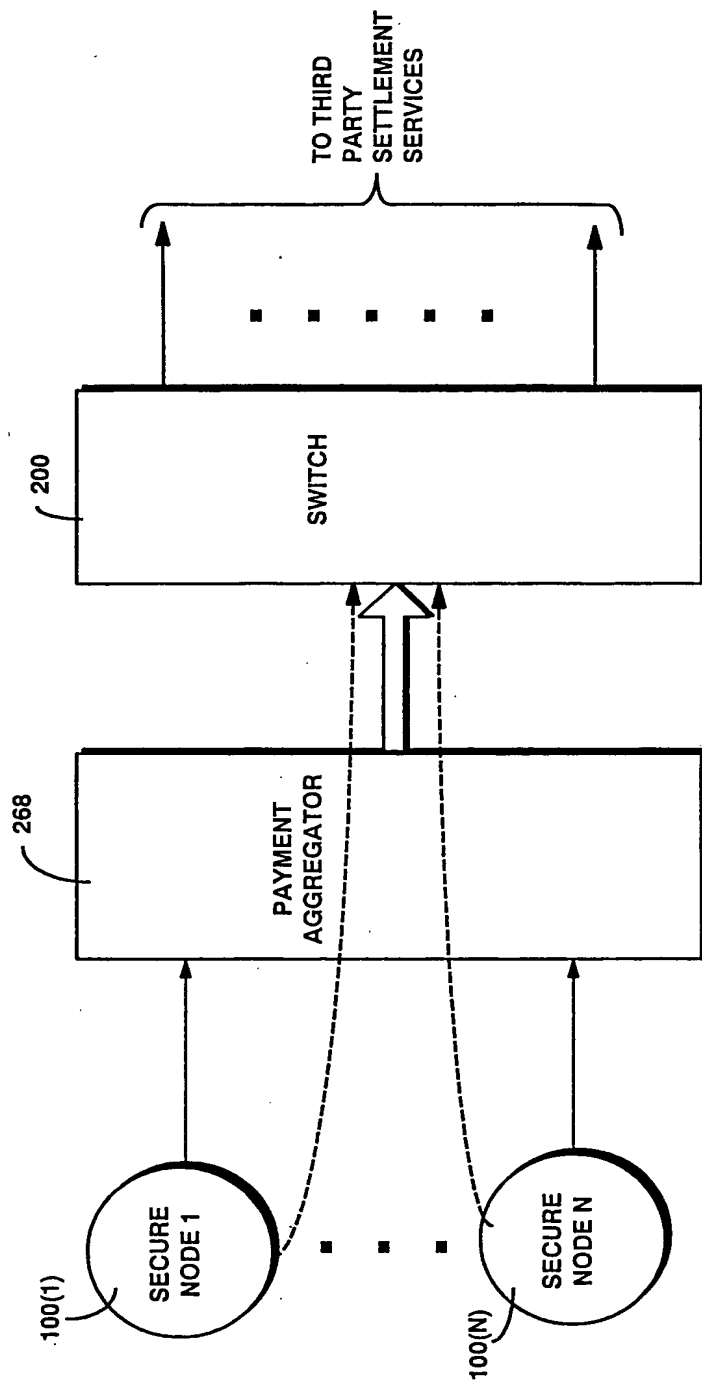


FIG. 33
Example Usage
Clearinghouse

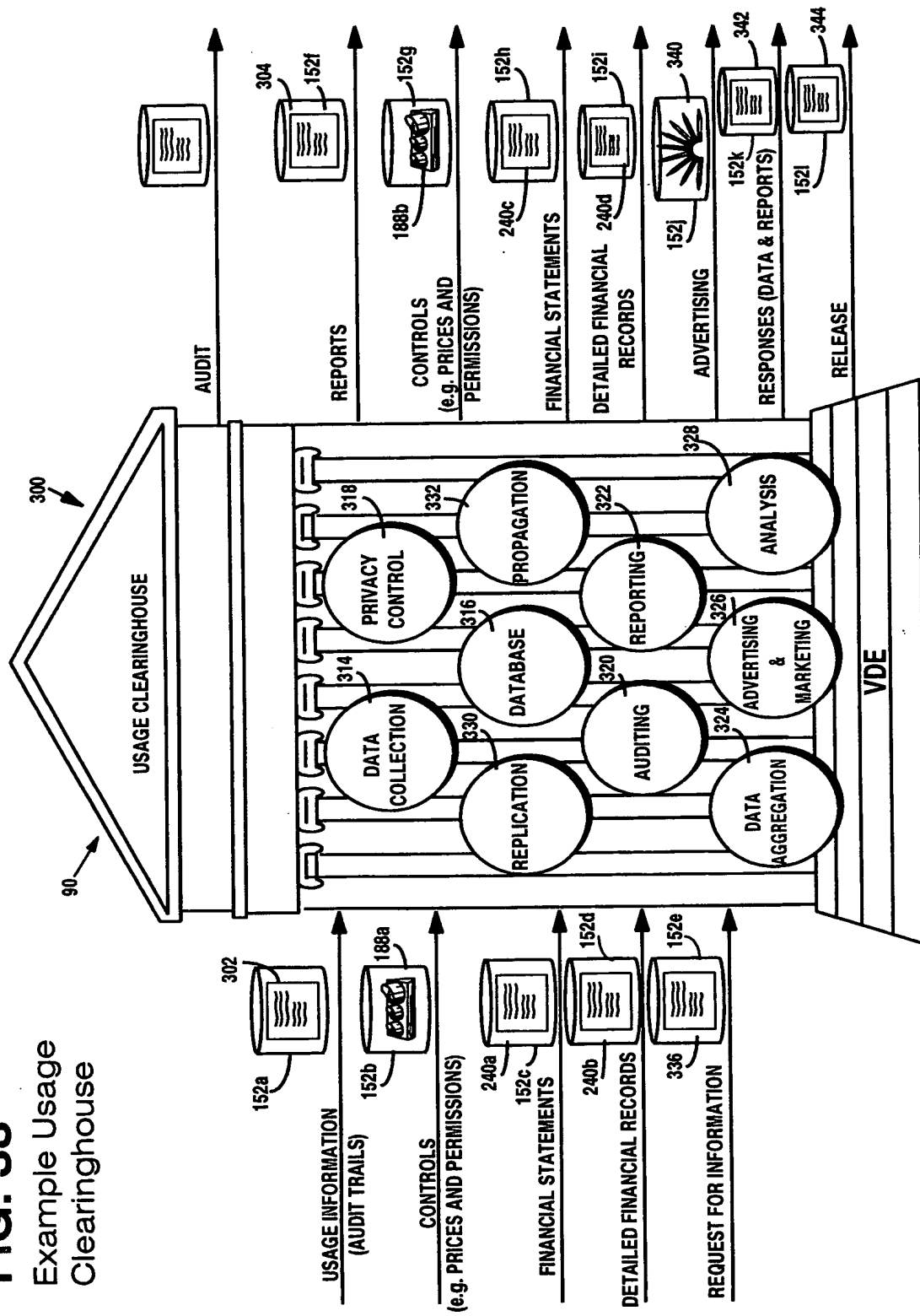


FIG. 34
EXAMPLE USAGE
CLEARINGHOUSE

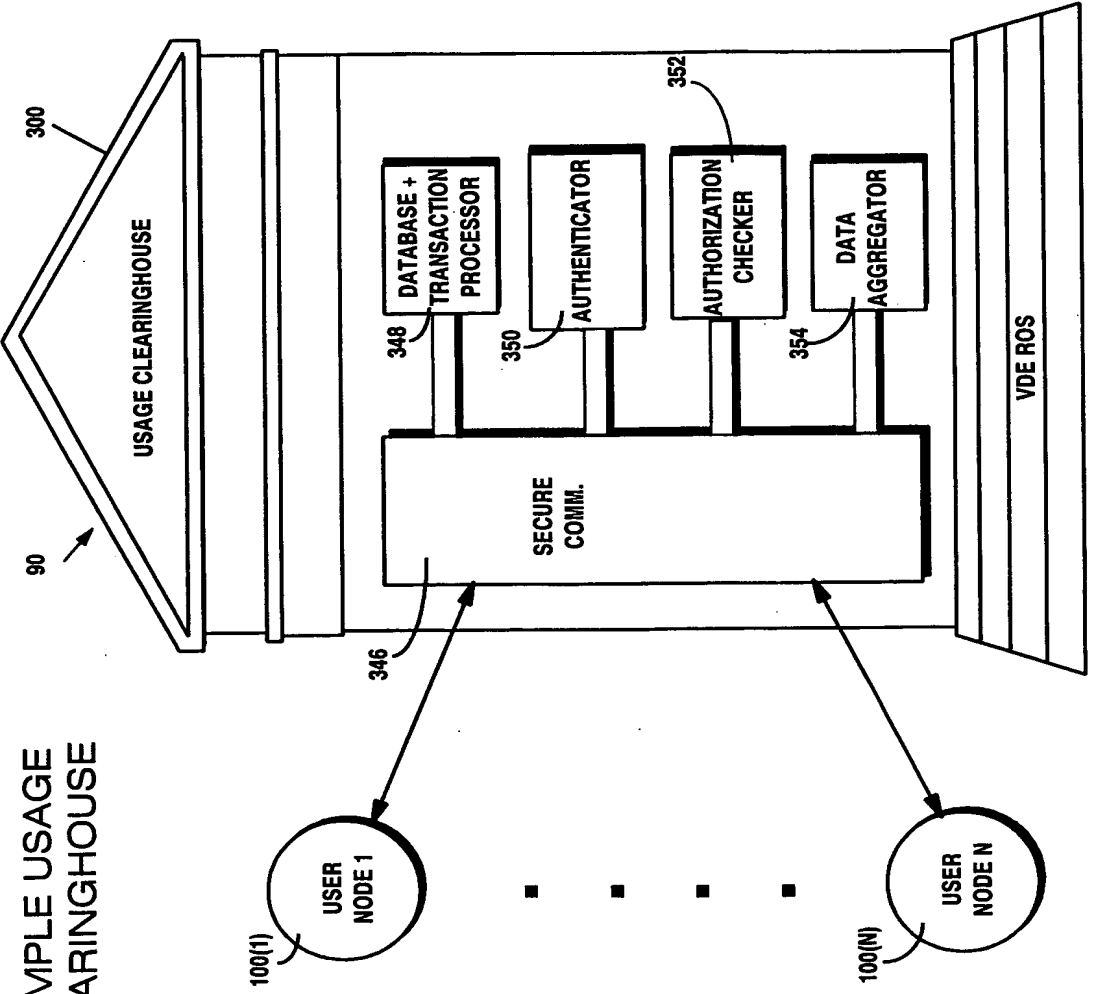


FIG. 35 Example Usage Clearing Process

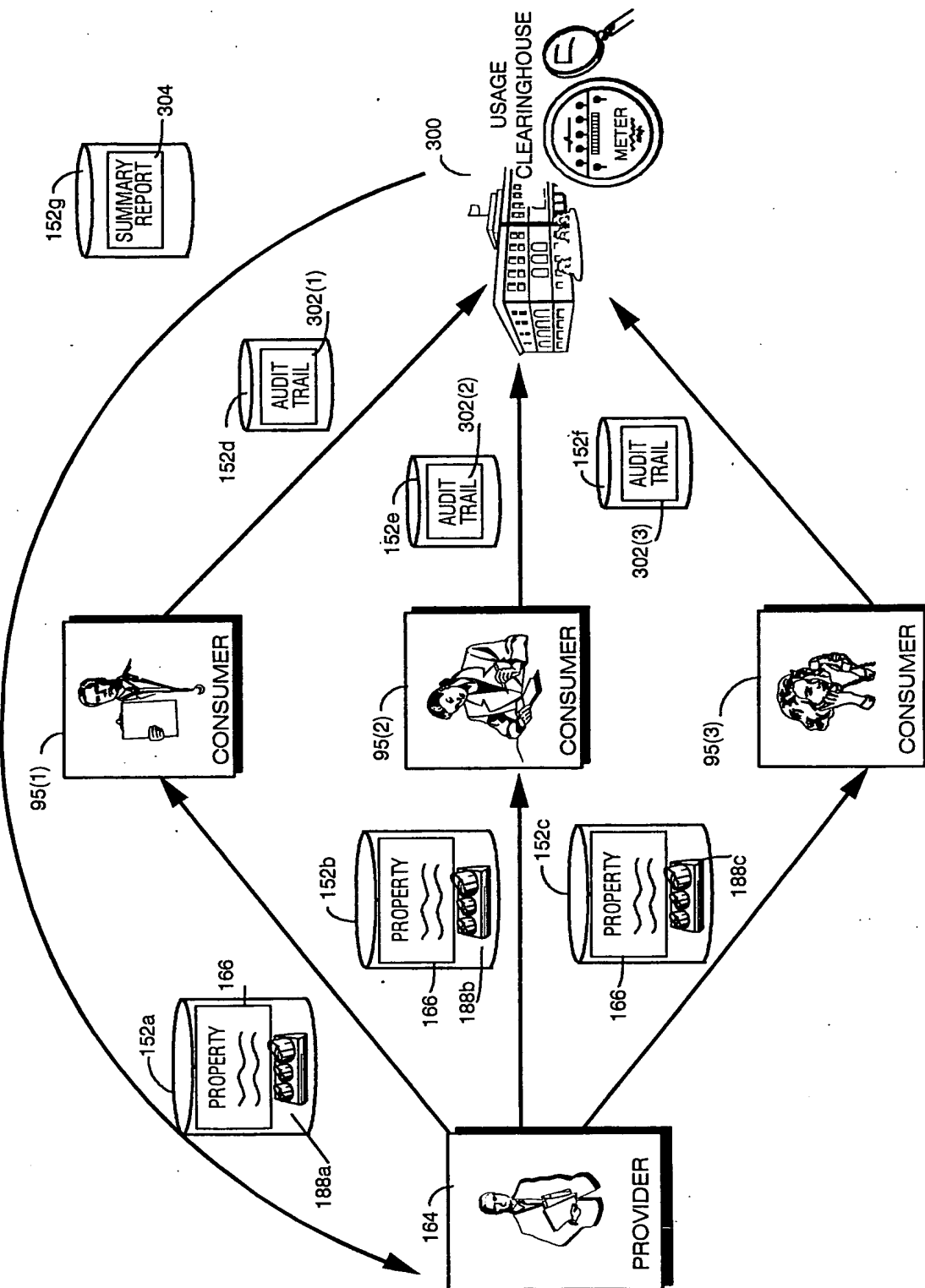


FIG. 36 Example Usage Clearing Process

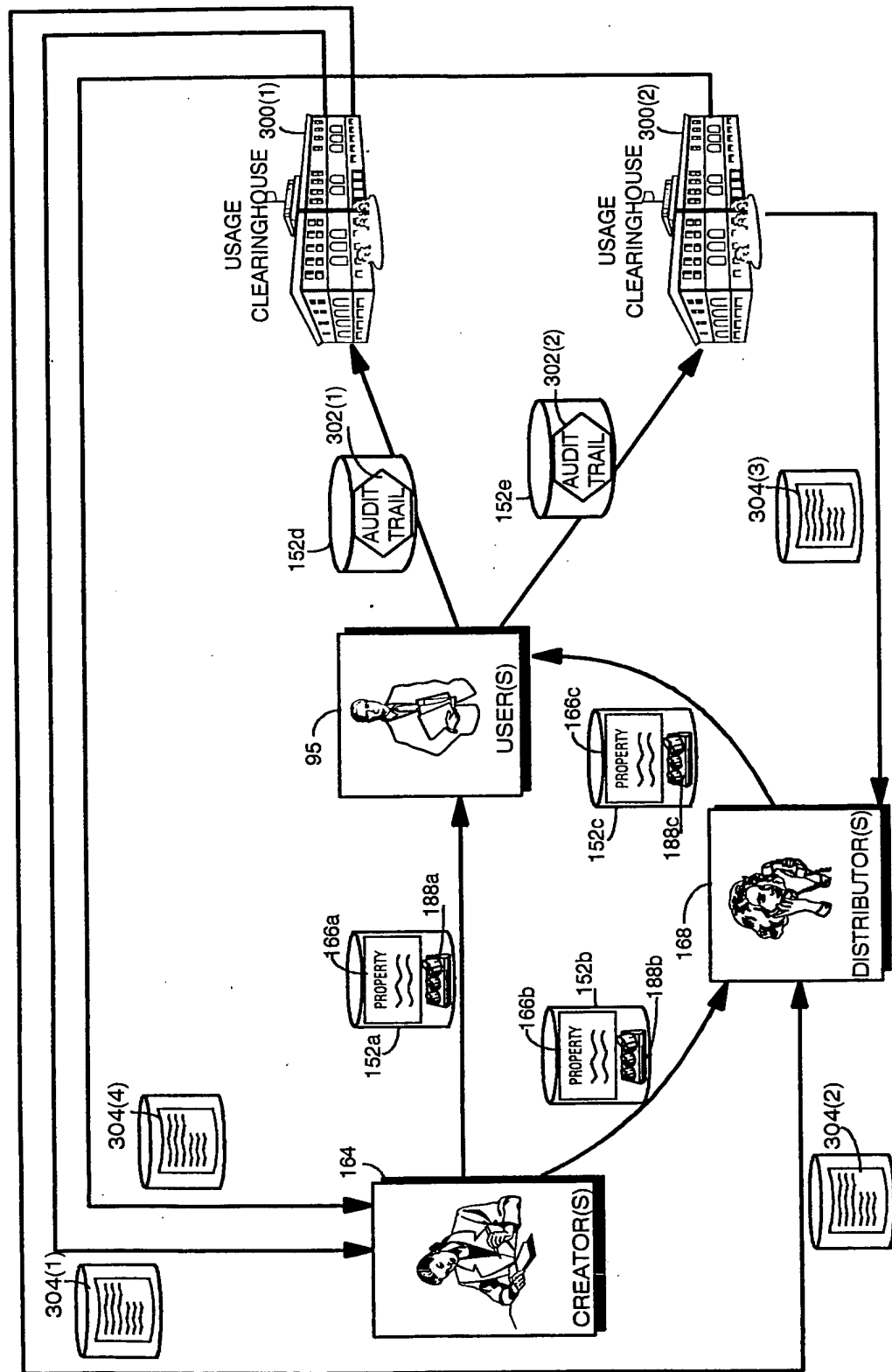


FIG. 37 Example Financial & Usage Clearinghouse Process

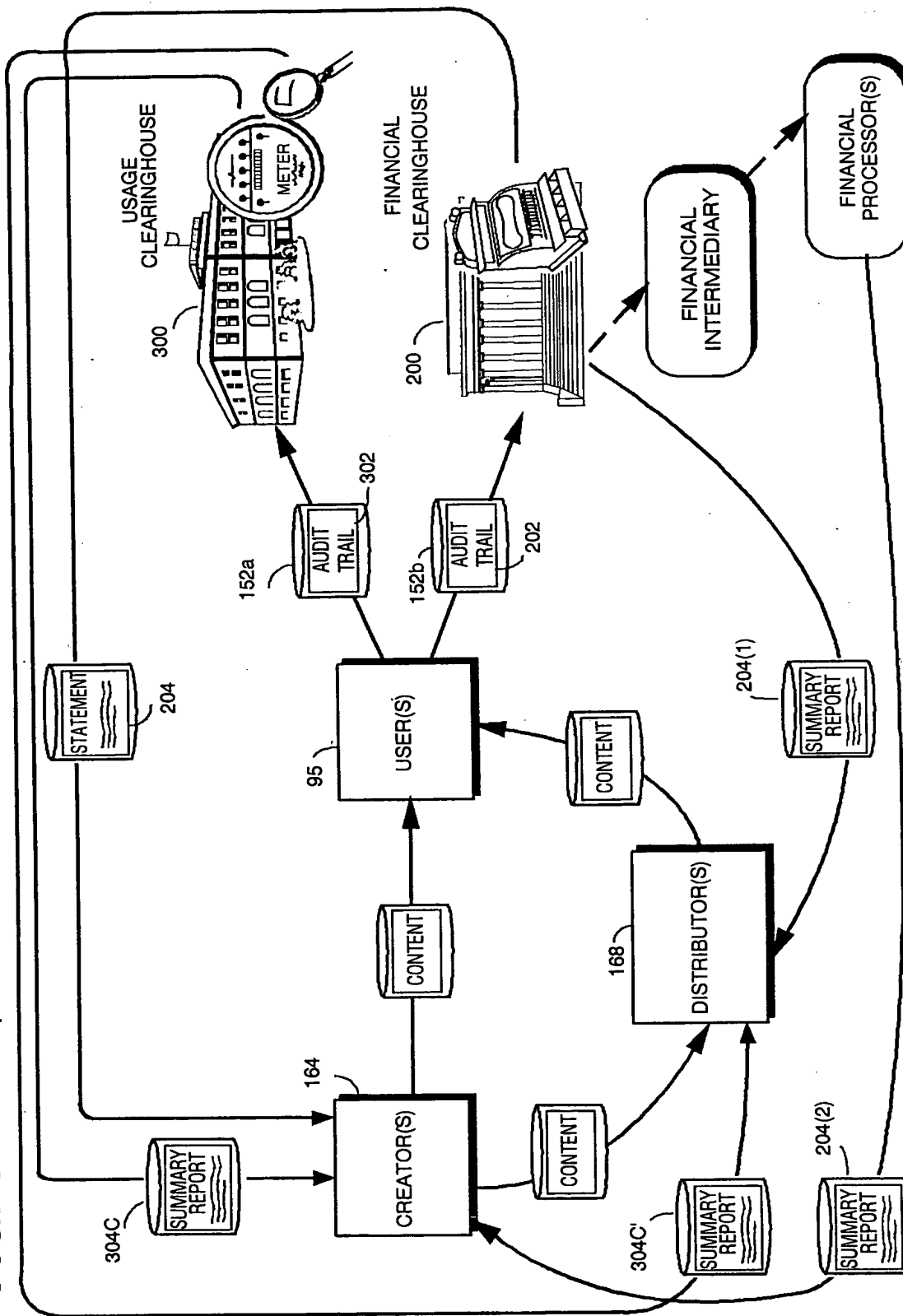


FIG. 38 EXAMPLE USAGE CLEARINGHOUSE MEDIA PLACEMENT

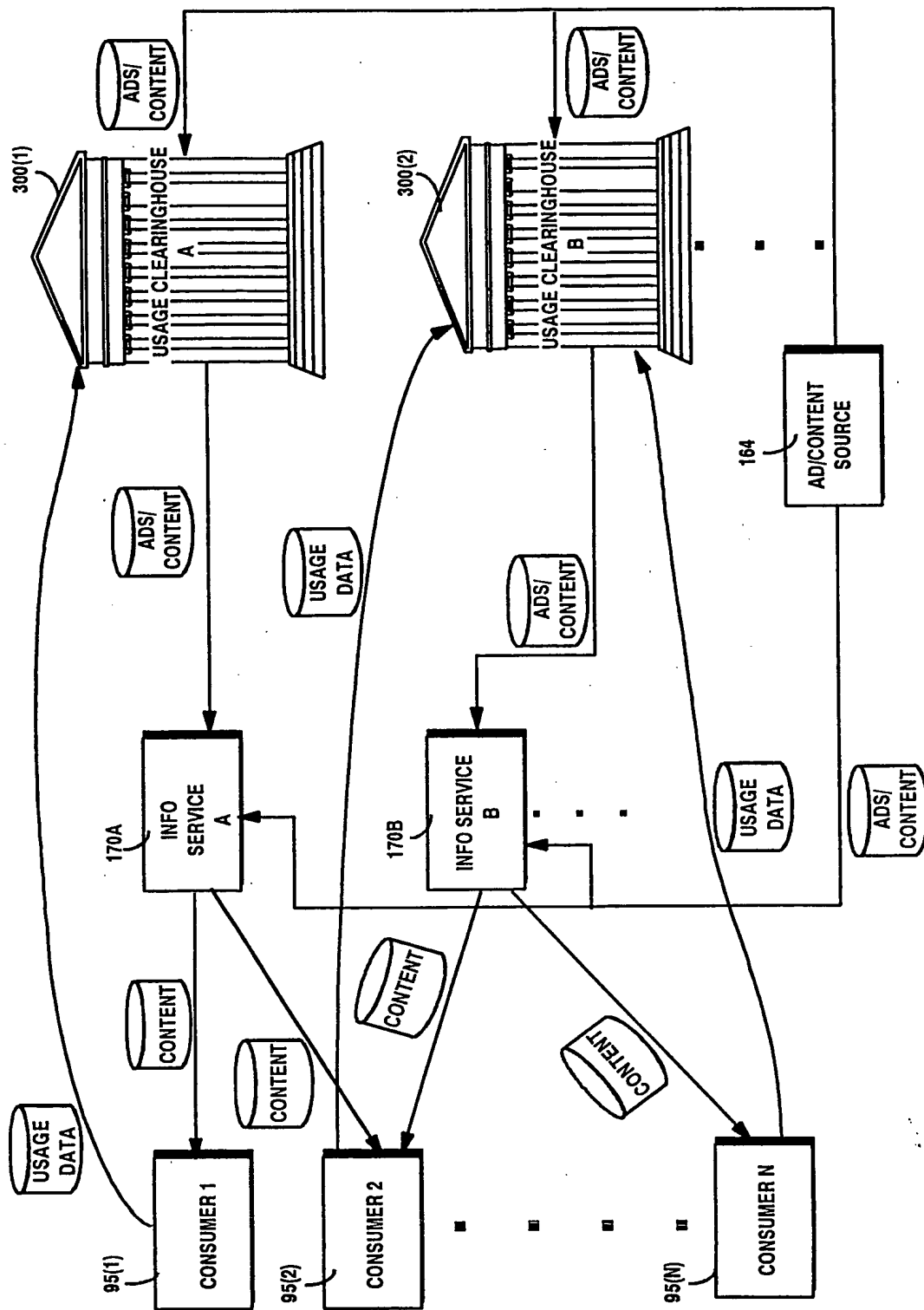


FIG. 39
 EXAMPLE USAGE CLEARINGHOUSE
 DISCOUNTS BASED ON DISCLOSURE

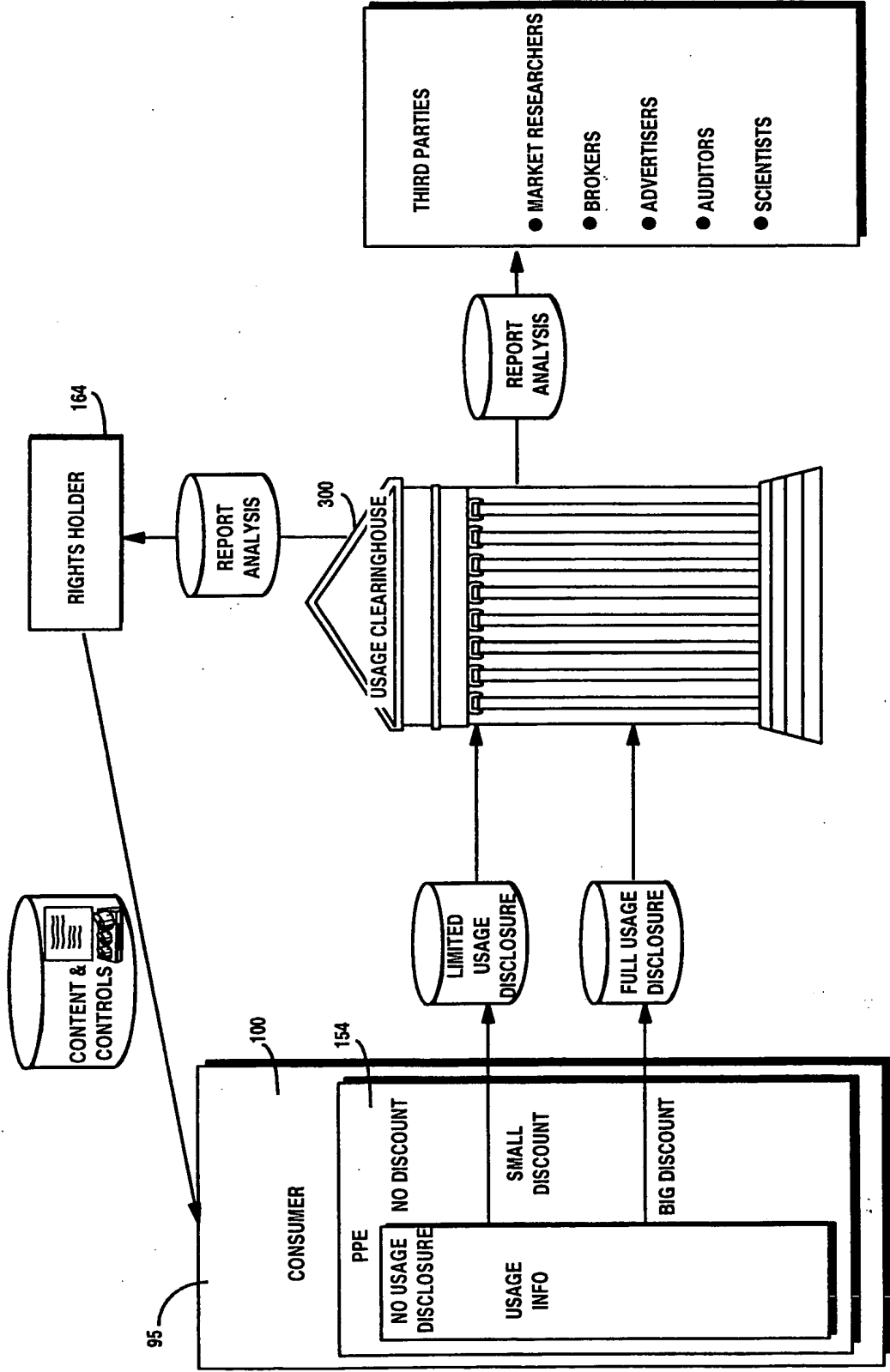


FIG. 40
Example Rights
and Permissions
Clearinghouse

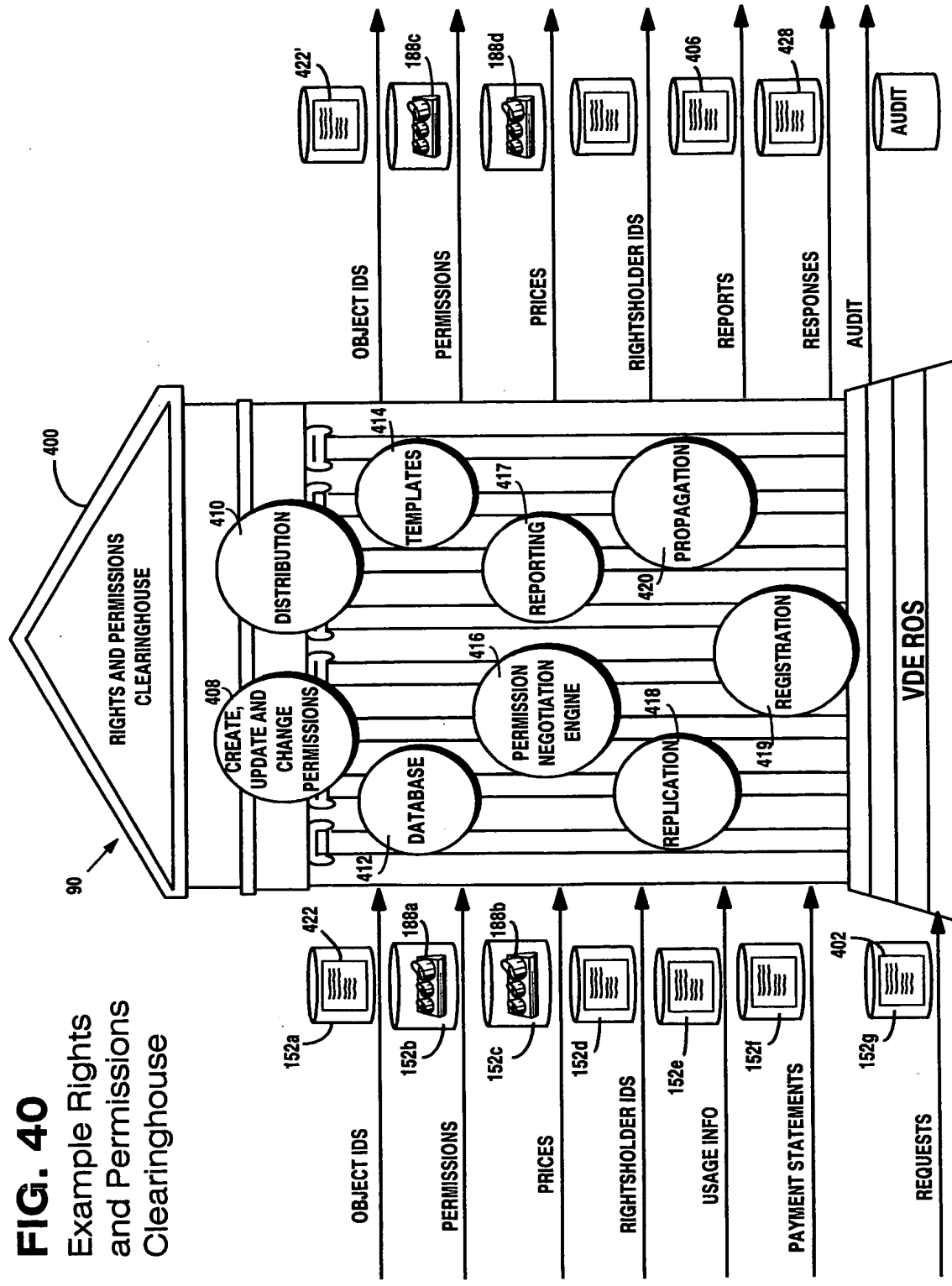


FIG. 41
Rights and Permissions
Clearinghouse

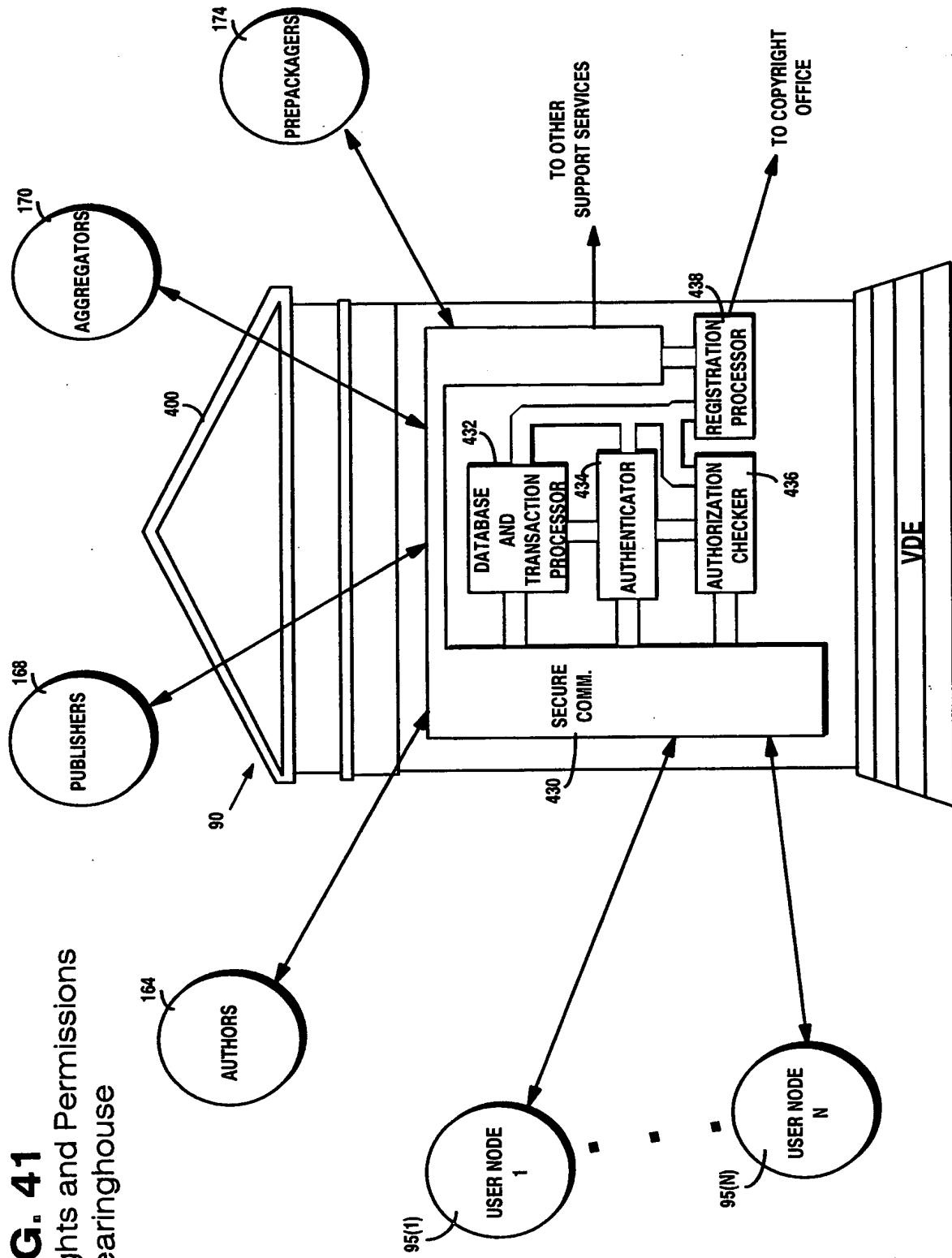
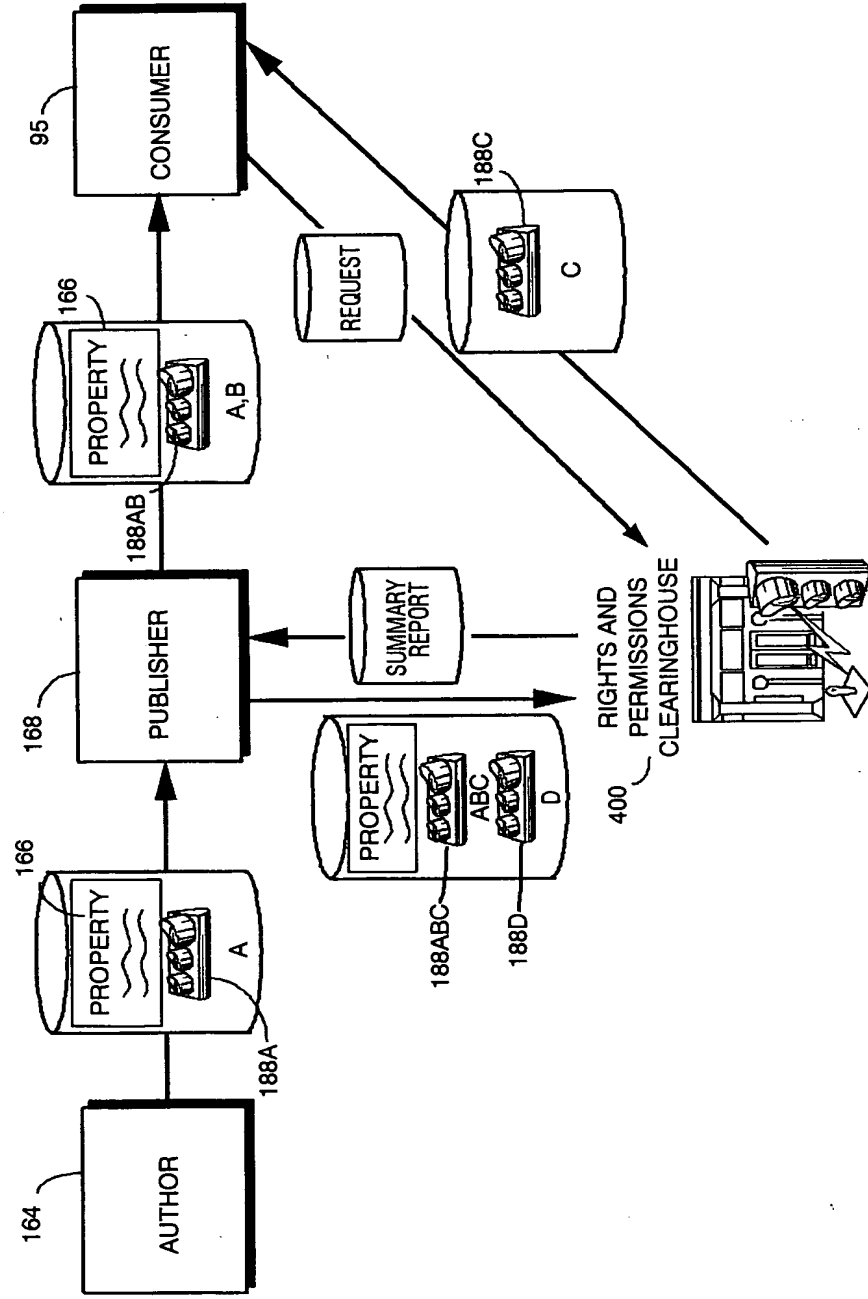


FIG. 42 Example Rights & Permissions Clearinghouse Process



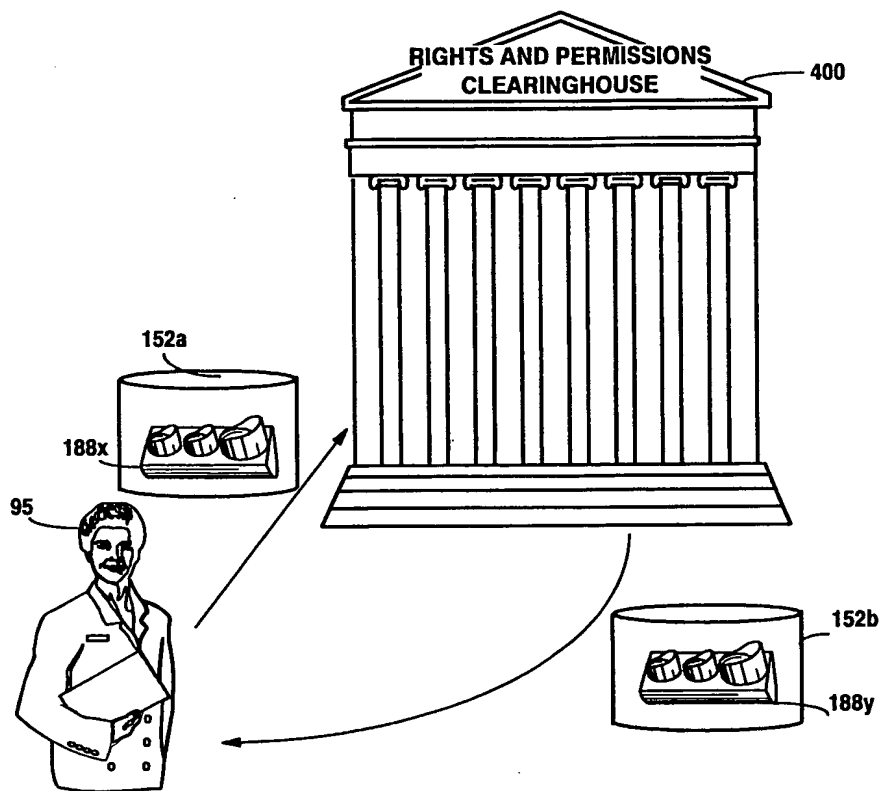
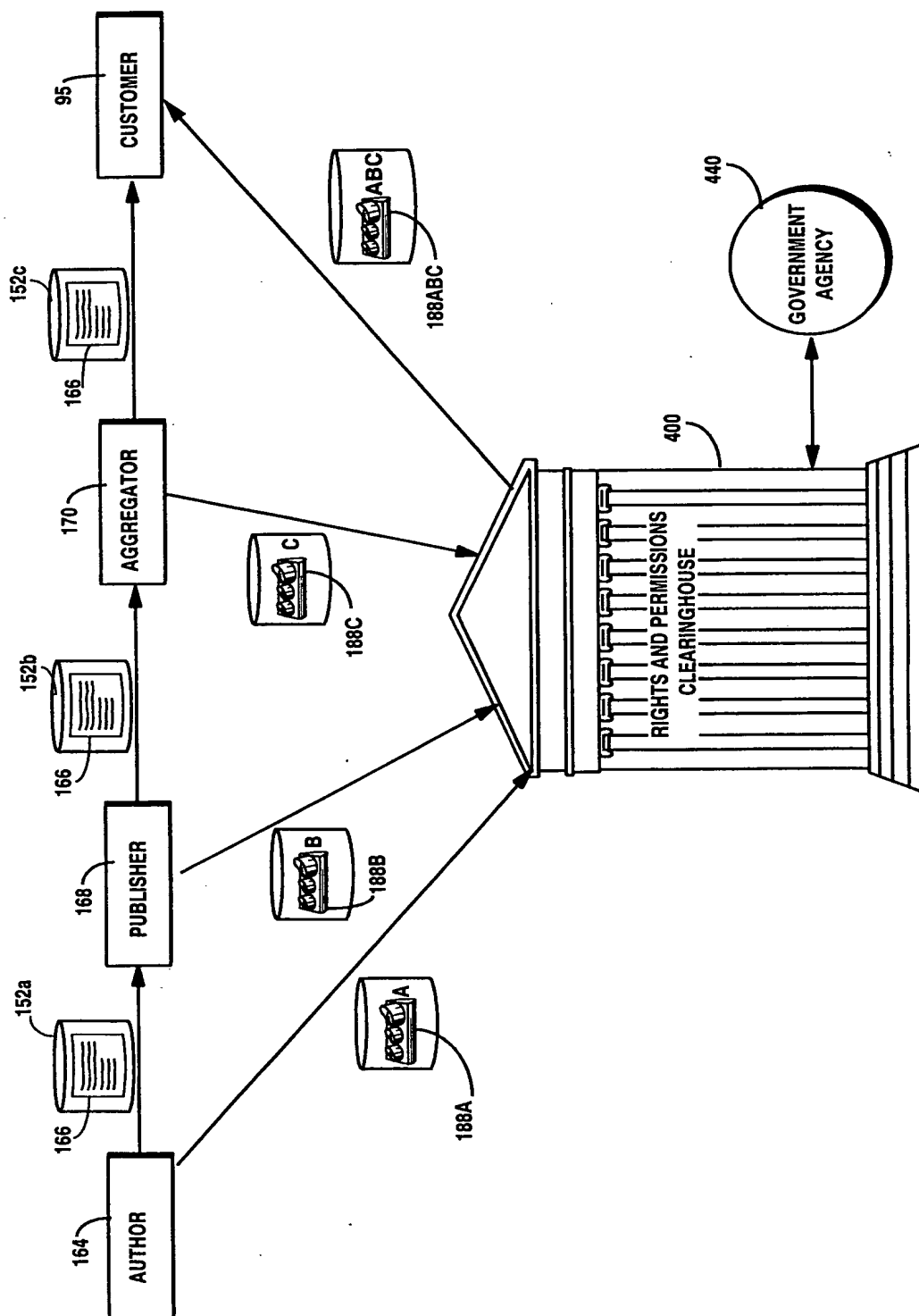


FIG. 42A

Consumer Registers Control Set
To Request Updates

FIG. 43 EXAMPLE RIGHTS AND PERMISSIONS VALUE CHAIN



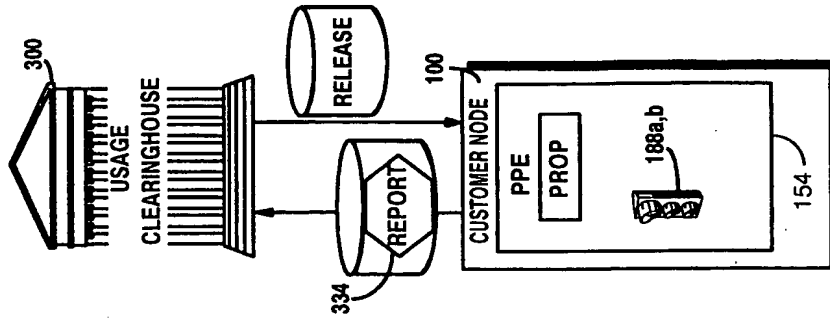


FIG. 44E
Customer
Node Reports
Aspects Of
Usage

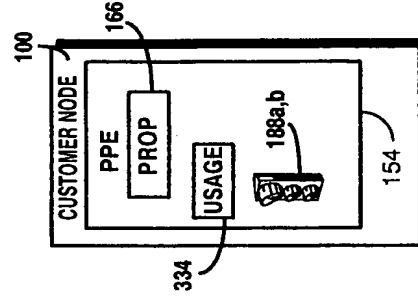


FIG. 44D
Customer
Uses Property
In Accordance
With Rights

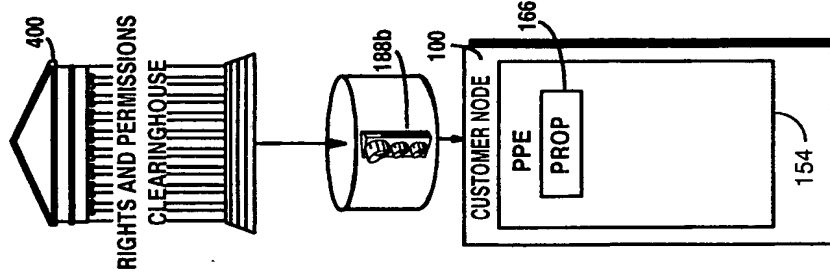


FIG. 44C
Rights and
Permissions
Clearinghouse
Provides Rights
To Customer

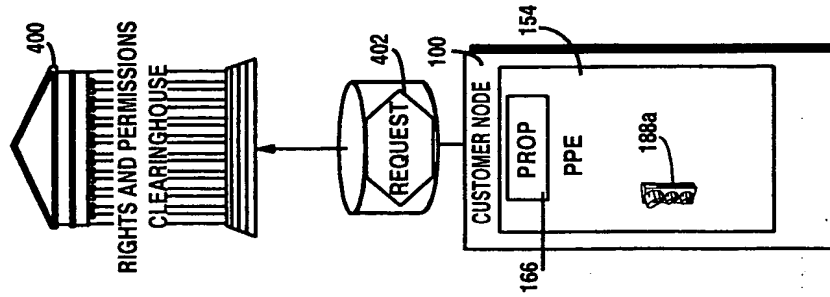


FIG. 44B
Customer
Requests Rights
To Use Property

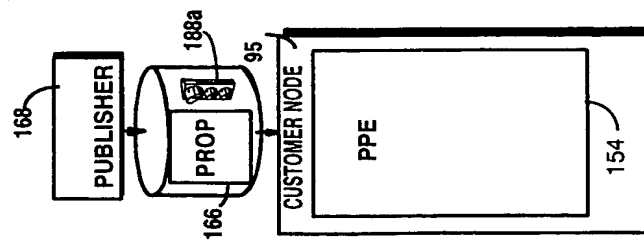


FIG. 44A
Customer
Receives
Property

PERMISSION TYPE

ACTION	UNCOND. PERMIT	COND. ON PAYMENT	CONTENT BASED	UNCOND. PROHIBIT	PRICING MODELS			
VIEW TITLE	✓							
VIEW ABSTRACT	✓							
MODIFY TITLE				✓			
REDIS-TRIBUTE			✓					
BACK UP		✓			ONE TIME PURCH.	PAY PER ACTION	DECL. COST	...
VIEW CONTENT		✓			ONE TIME PURCH.	PAY PER VIEW	DECL. COST	...
PRINT CONTENT		✓			ONE TIME PURCH.	PAY PER PRINT	DECL. COST	...

FIG. 45A EXAMPLE RIGHTS TEMPLATE

188	VIEW TITLE CONTROL	188(1)
	VIEW ABSTRACT CONTROL	188(2)
	MODIFY TITLE CONTROL	188(3)
	REDISTRIBUTE CONTROL	188(4)
	BACKUP CONTROL	188(5)
	VIEW CONTENT CONTROL	188(N-1)
	PRINT CONTENT CONTROL	188(N)

FIG. 45C EXAMPLE CONTROL SET

VIEW CONTENT	ONE TIME PURCHASE	↗	\$ _____
	PAY PER VIEW	↗	\$ _____
	DECLINING COST		\$ _____
PRINT CONTENT	ONE TIME PURCHASE		\$ _____
⋮			

FIG. 45B PRICING MODELS AND LEVELS

FIG. 46 Example Rights And Permissions Clearing Process

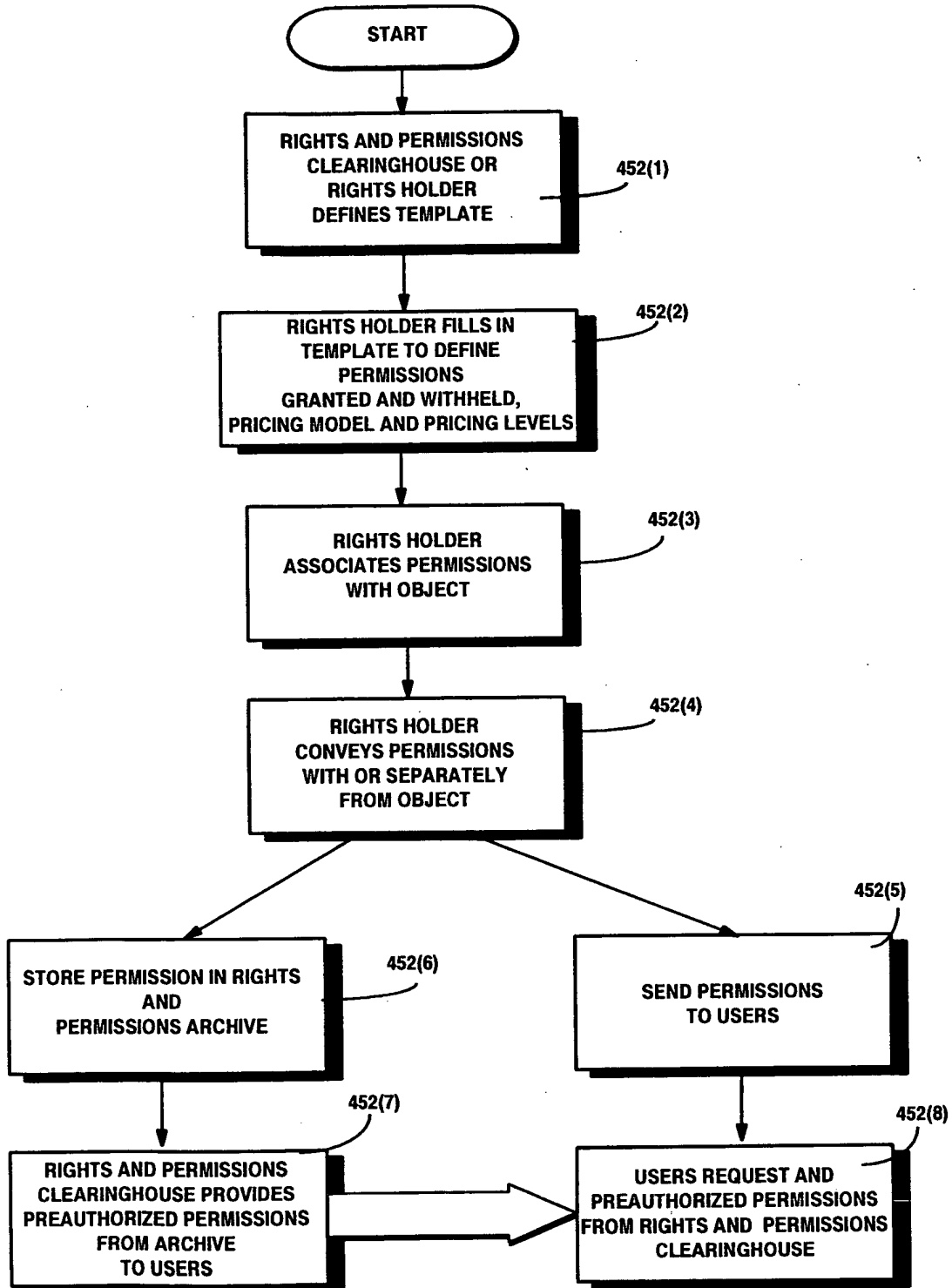


FIG. 47
Example Certifying
Authority

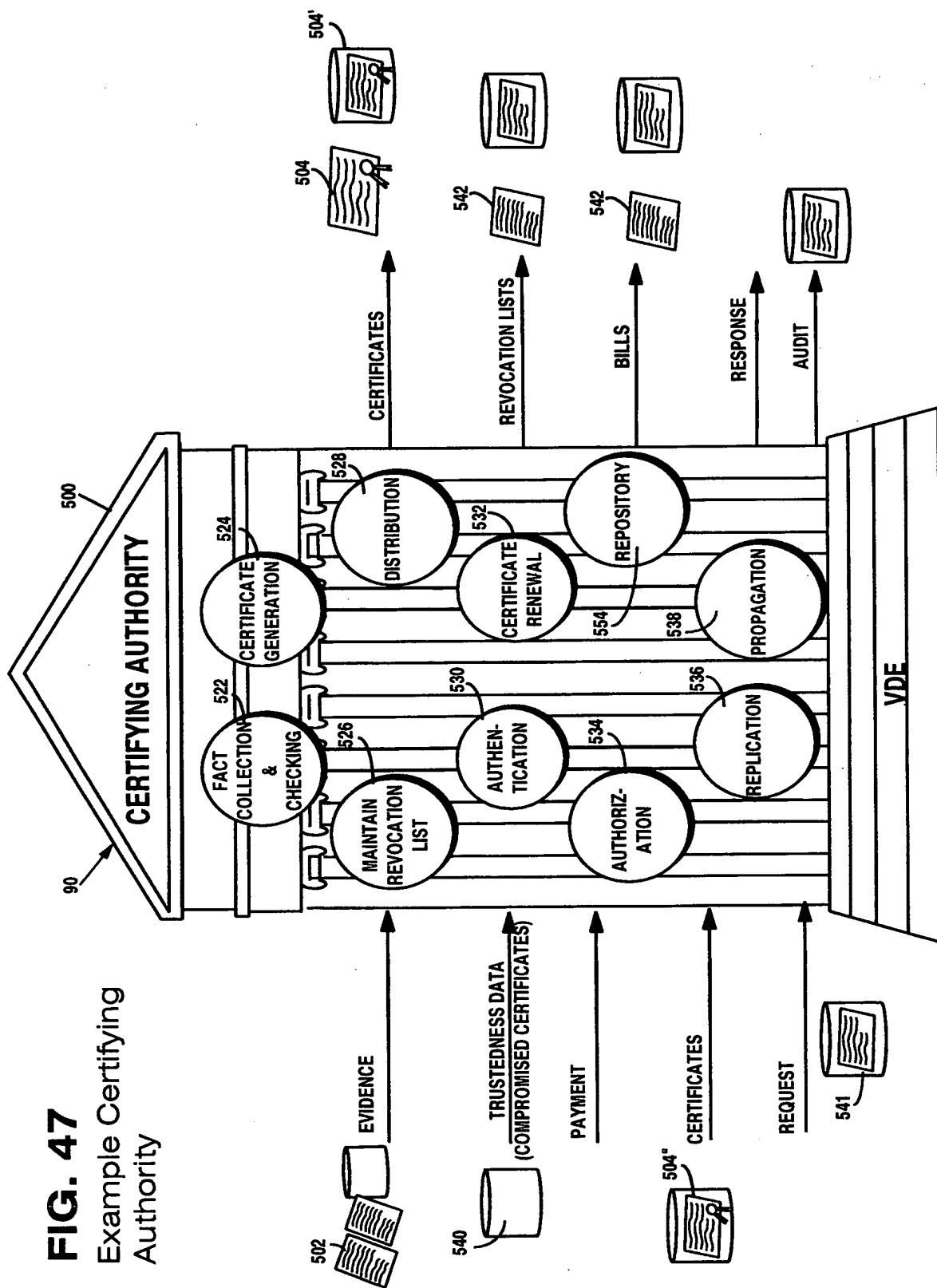


FIG. 48
Example Certifying
Authority

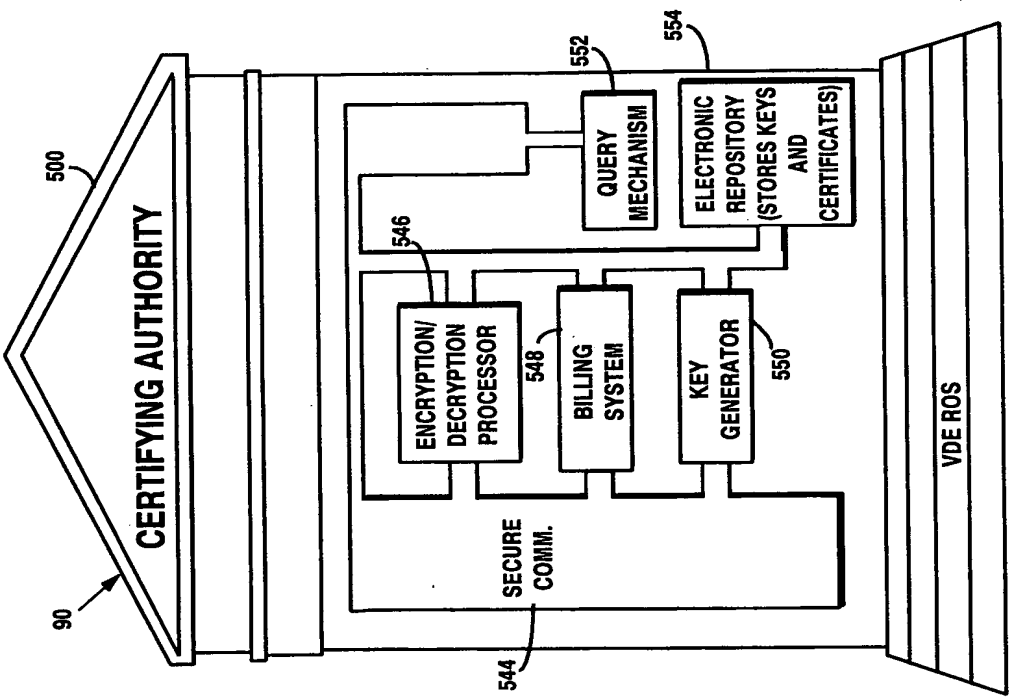
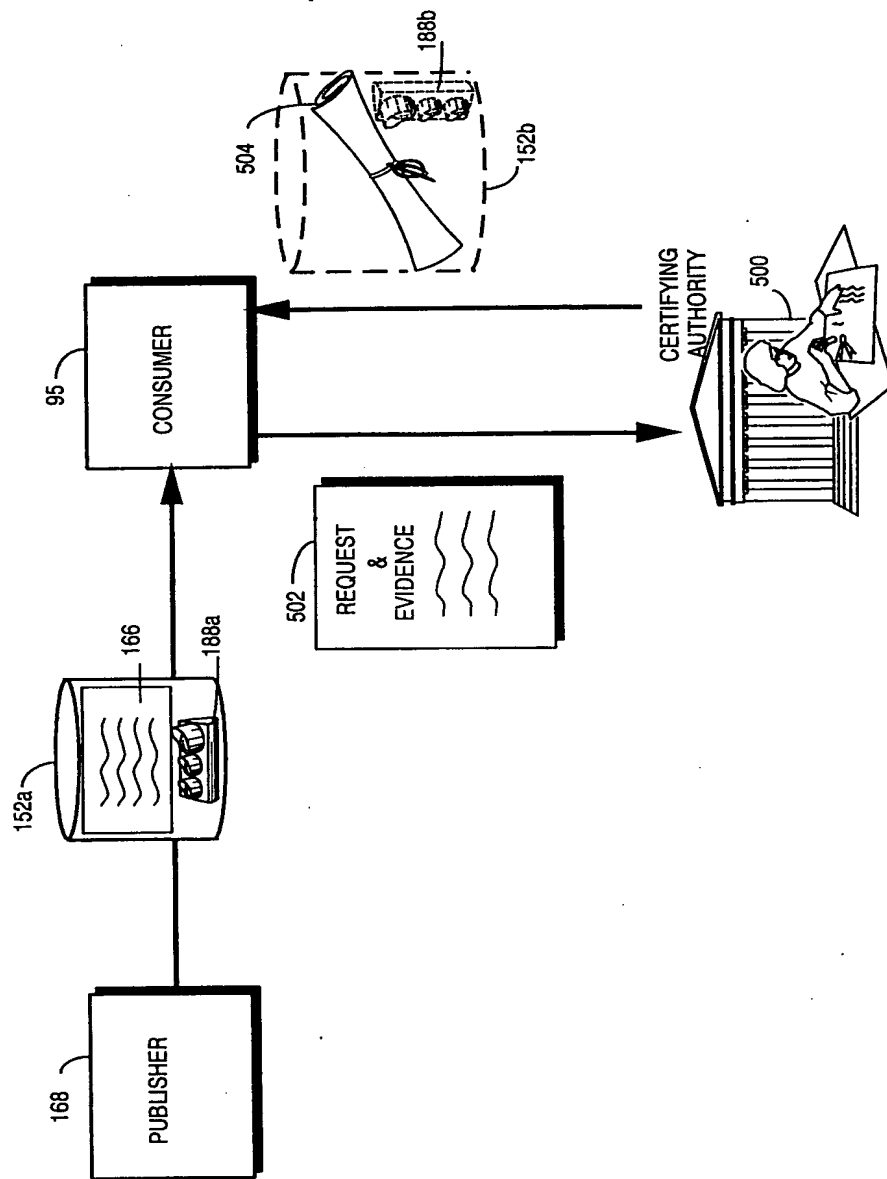


FIG. 49 Example Certifying Process



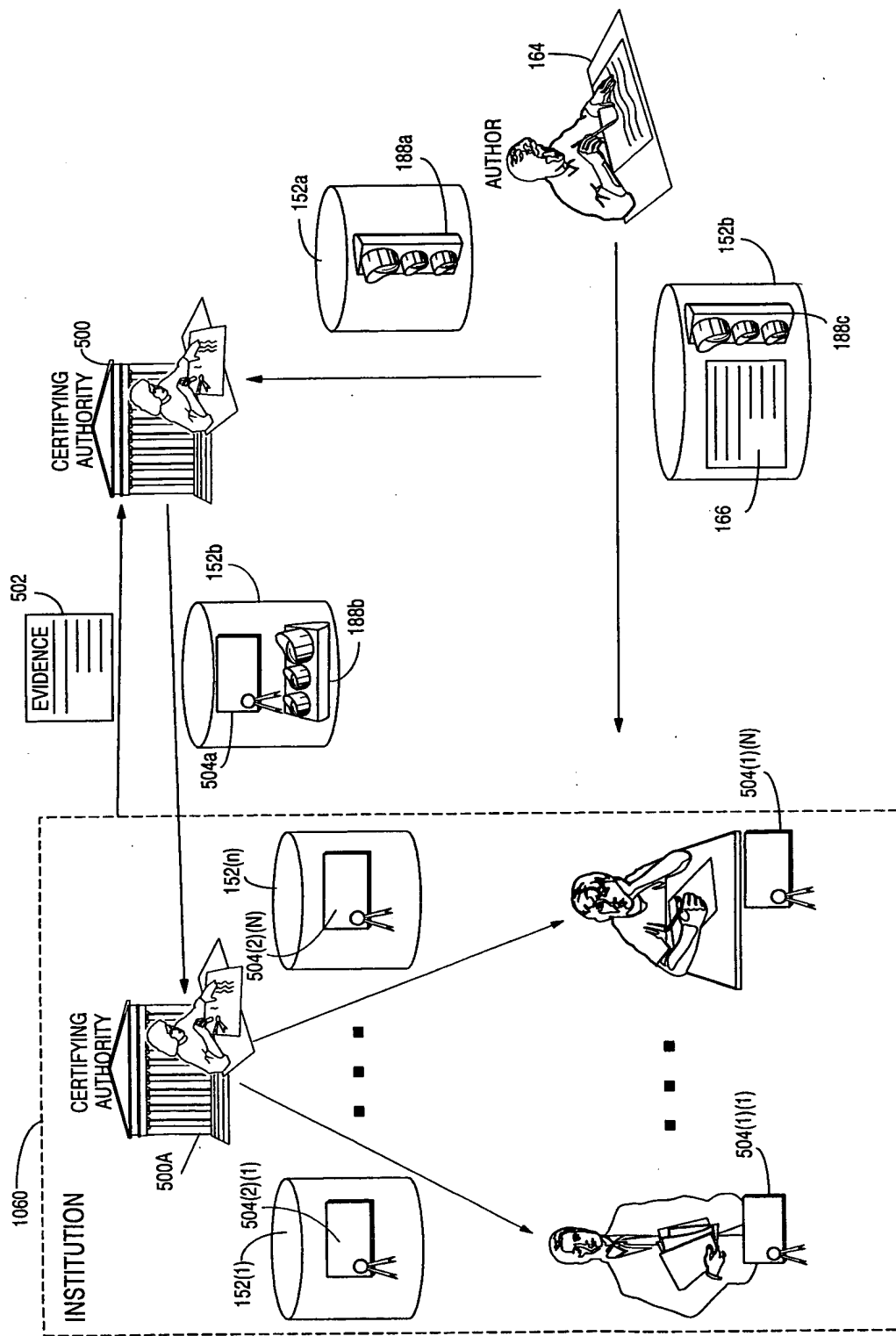
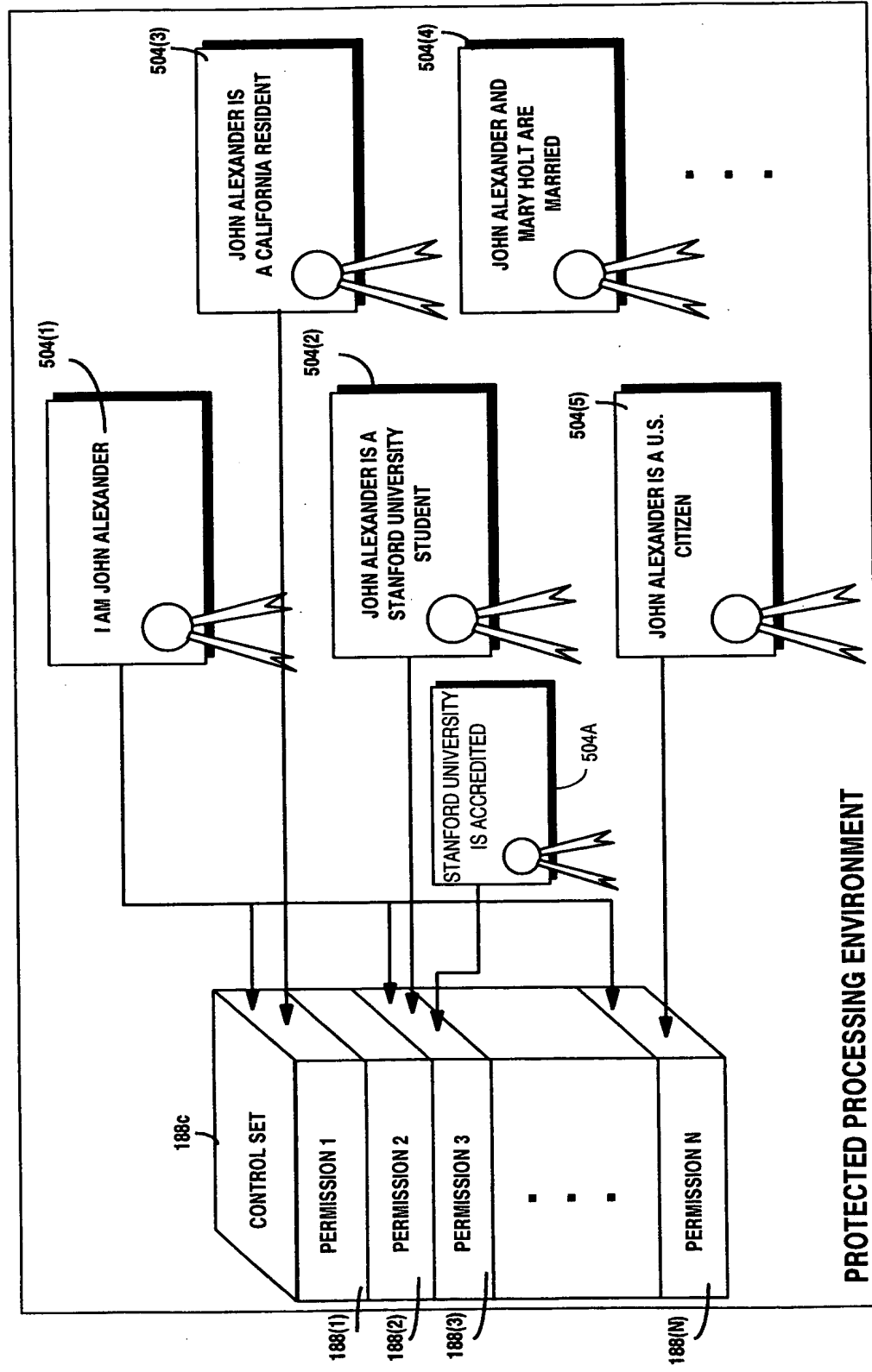
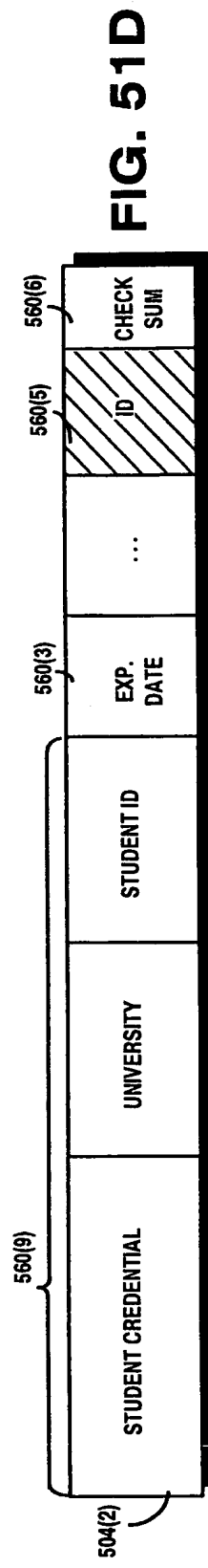
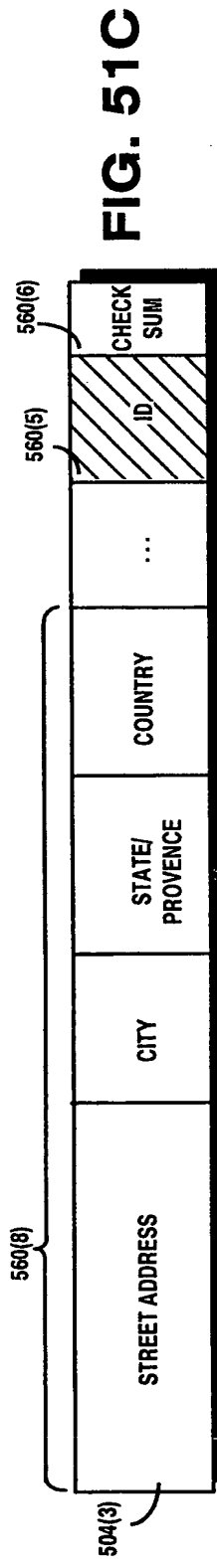
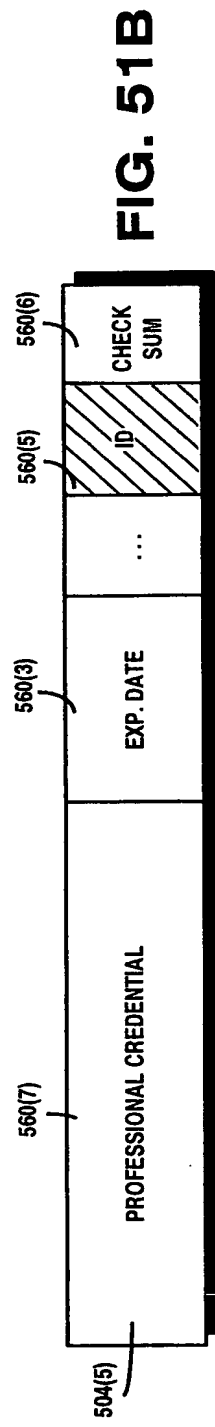
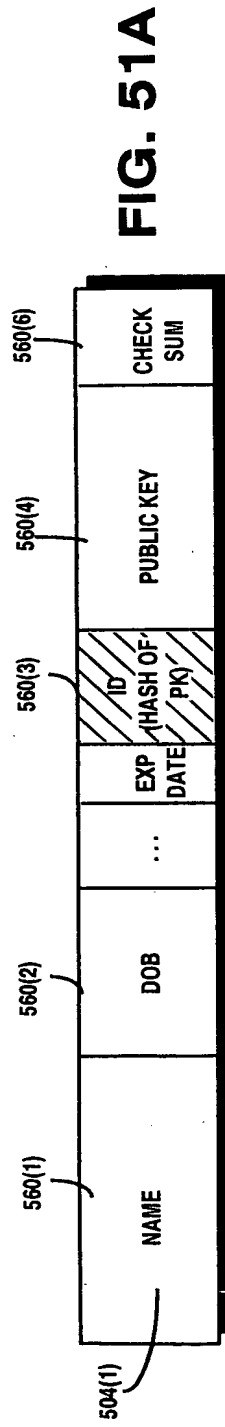


FIG. 50 Distributed Certificate Issuance

FIG. 50A Example Control Set Using Certificates





Example Digital Certificates

FIG. 51E Generating Certificates Based On Other Certificates

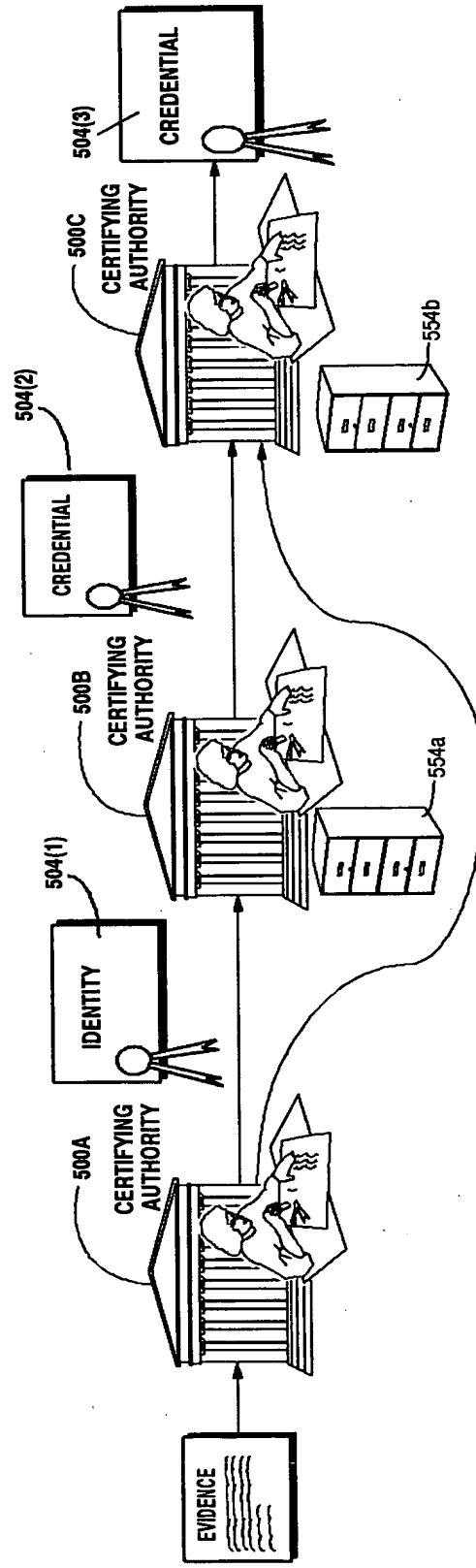


FIG. 51F

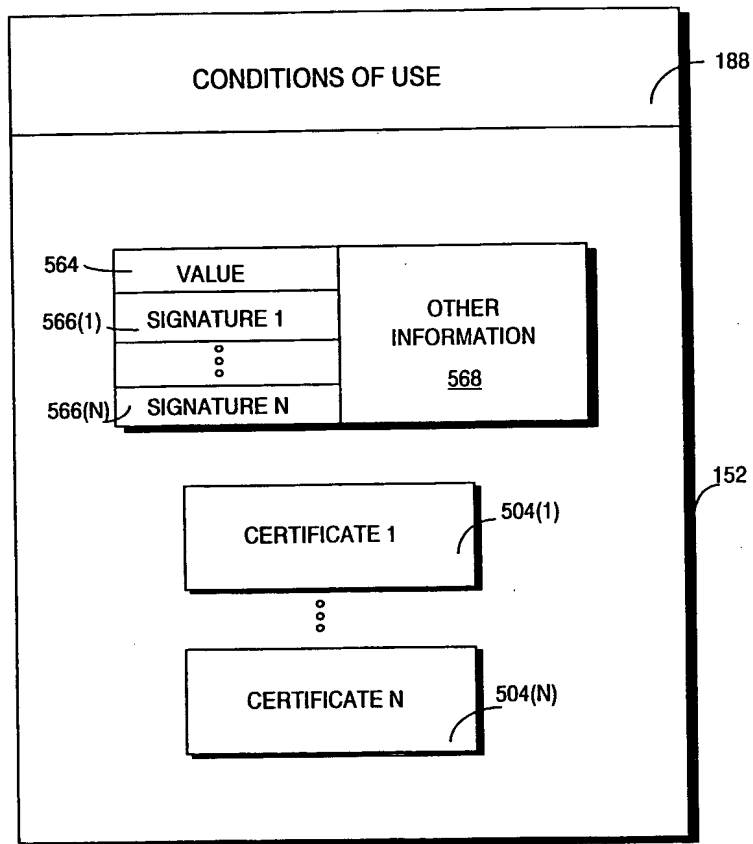


FIG. 51G

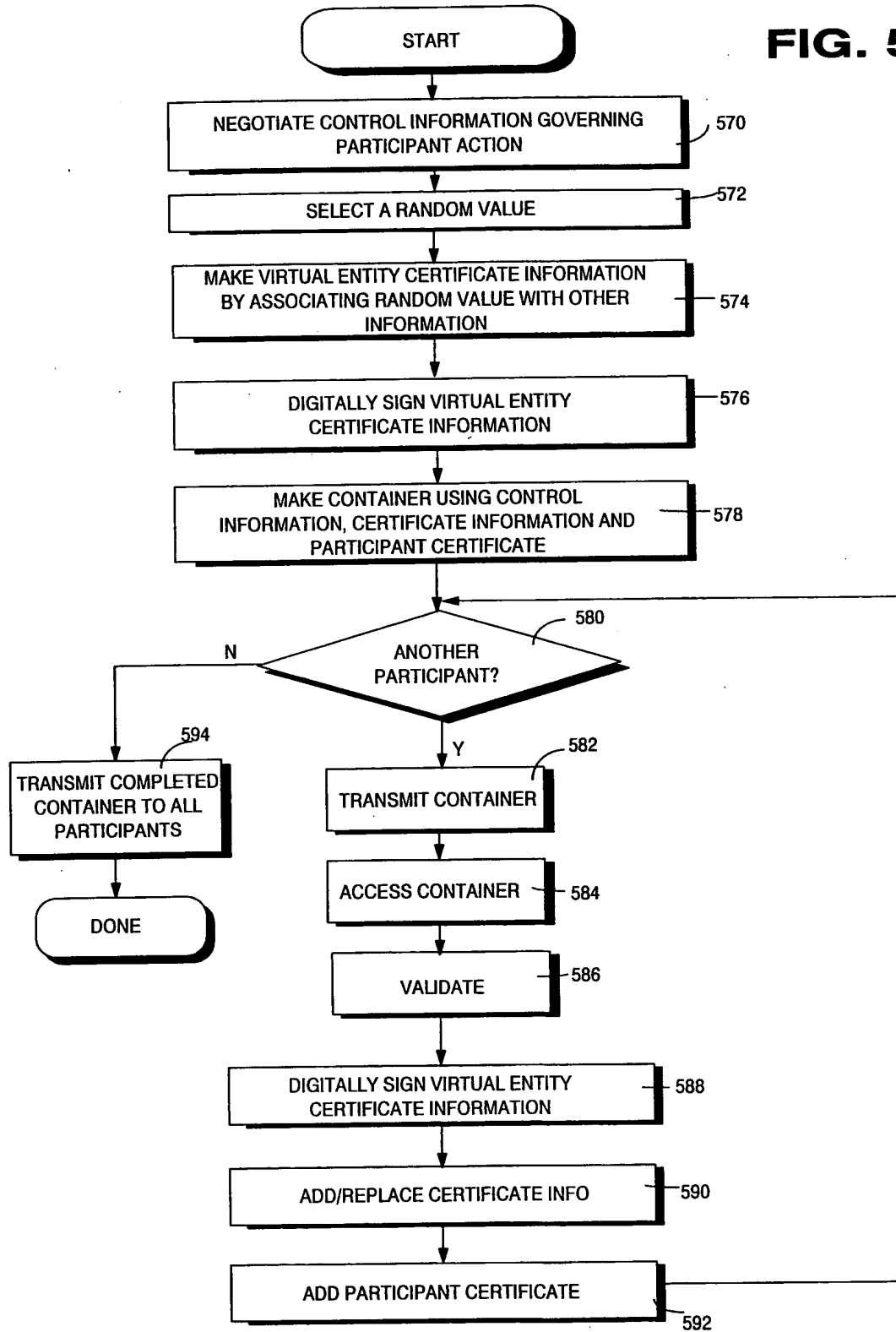
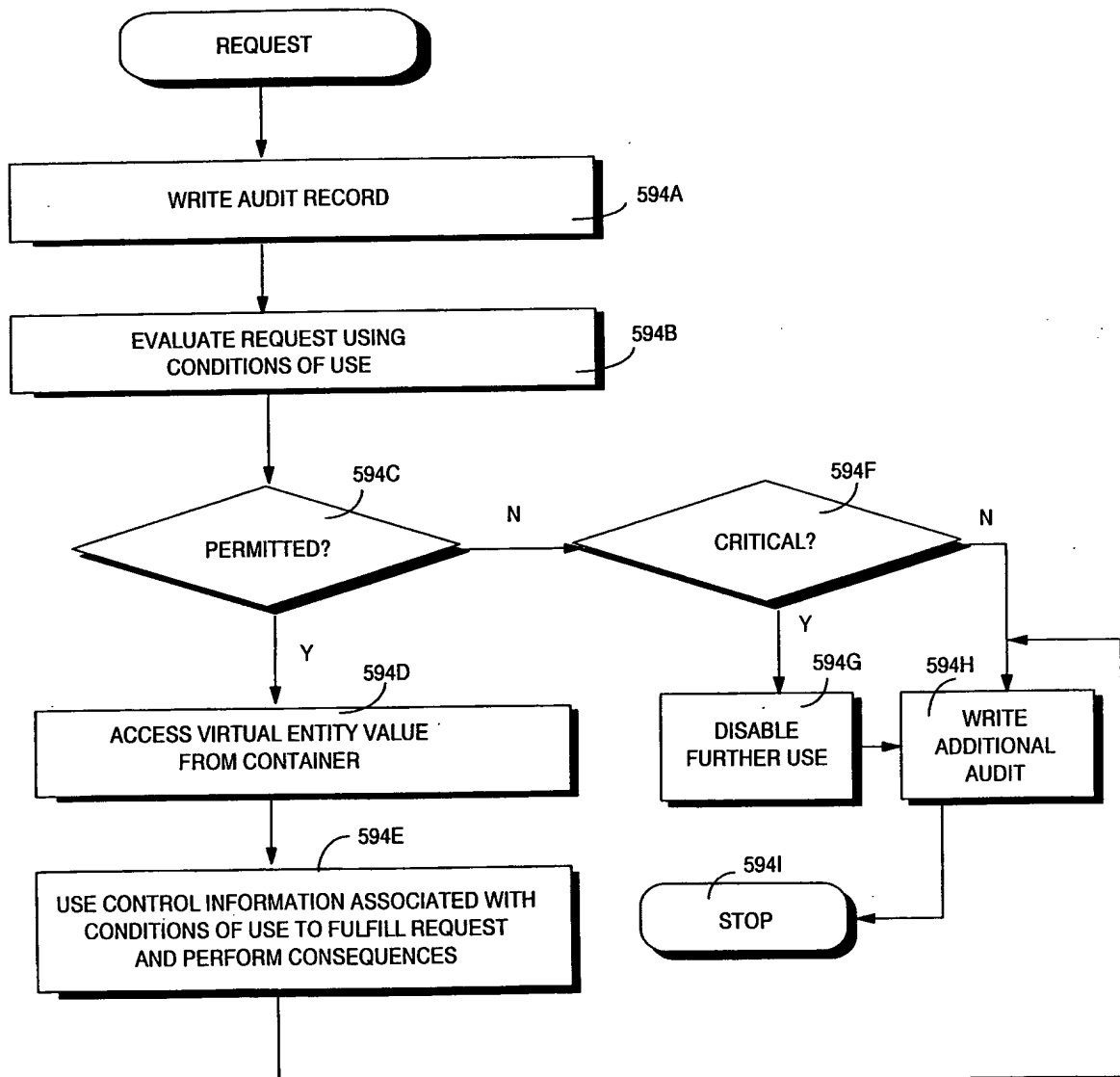


FIG. 51H



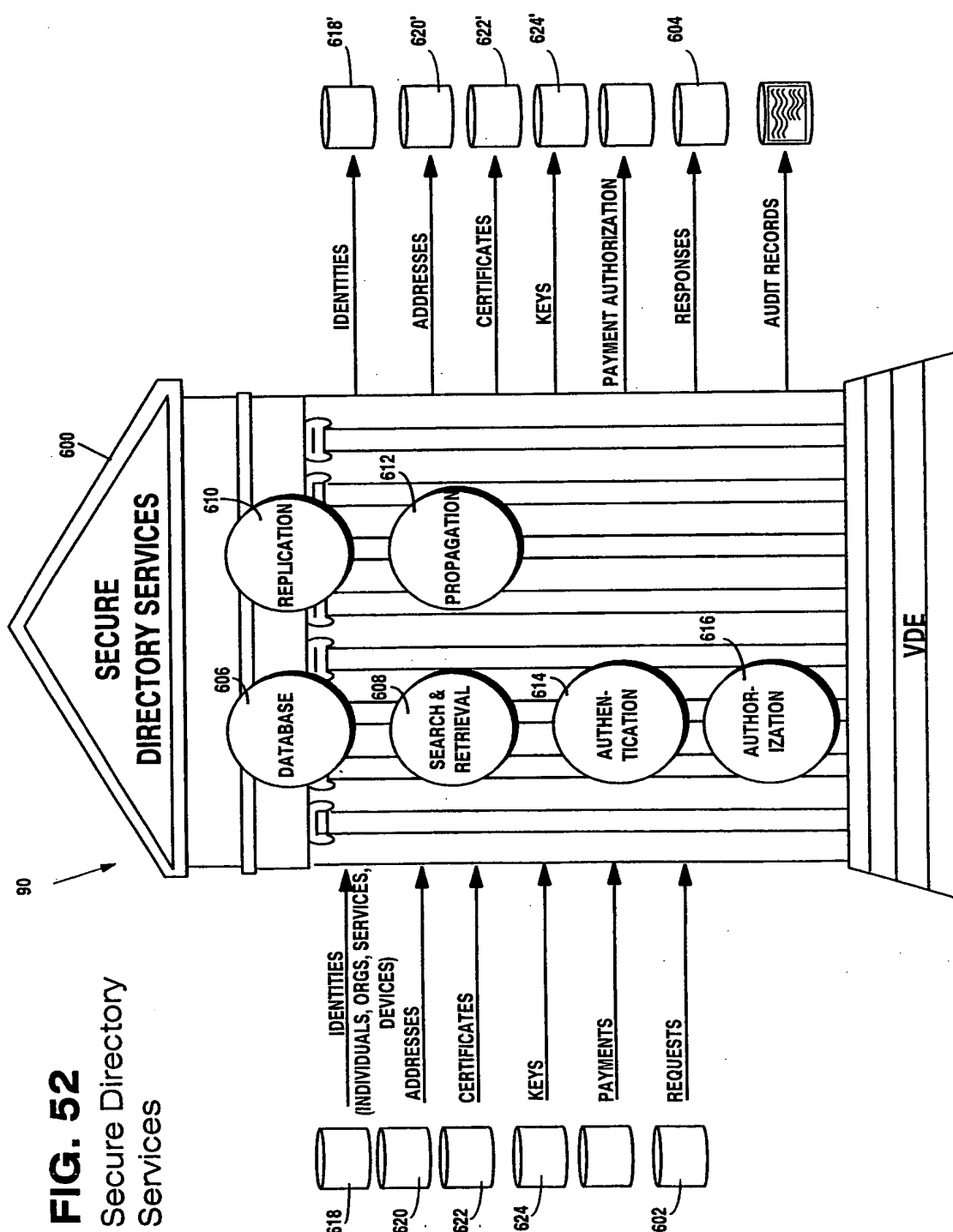


FIG. 52
Secure Directory
Services

FIG. 53
Example Secure
Directory Services

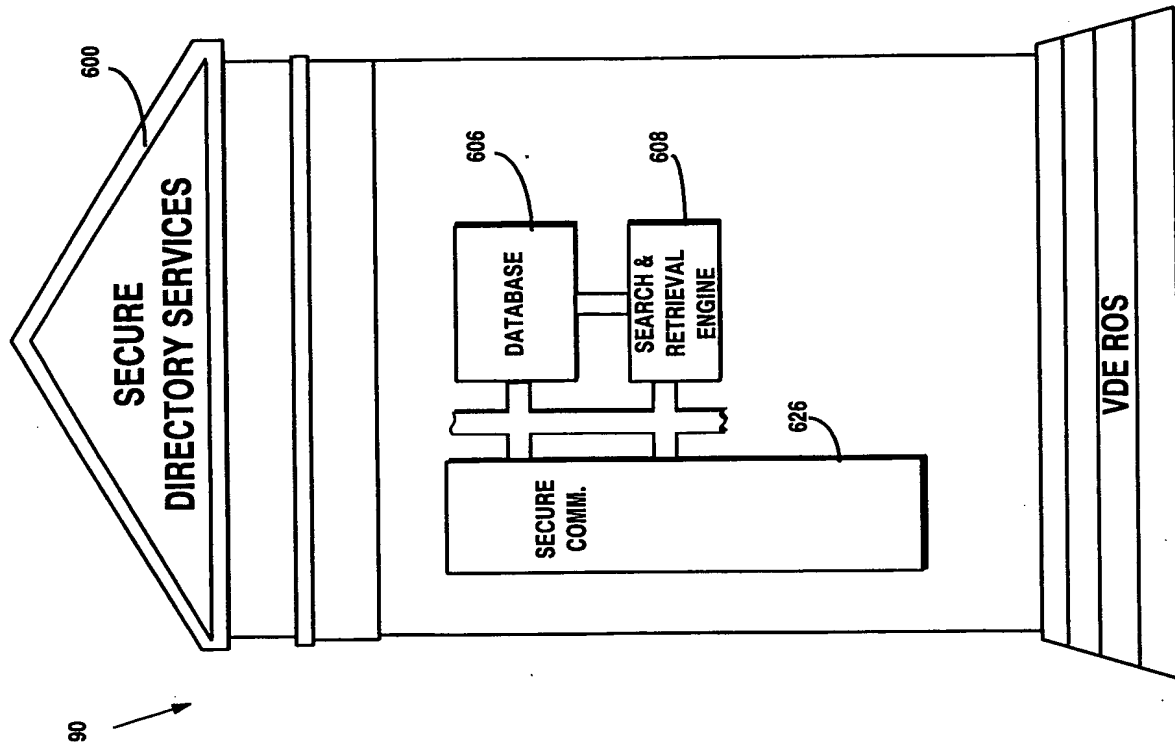


FIG. 54 Example Secure Directory Service Process

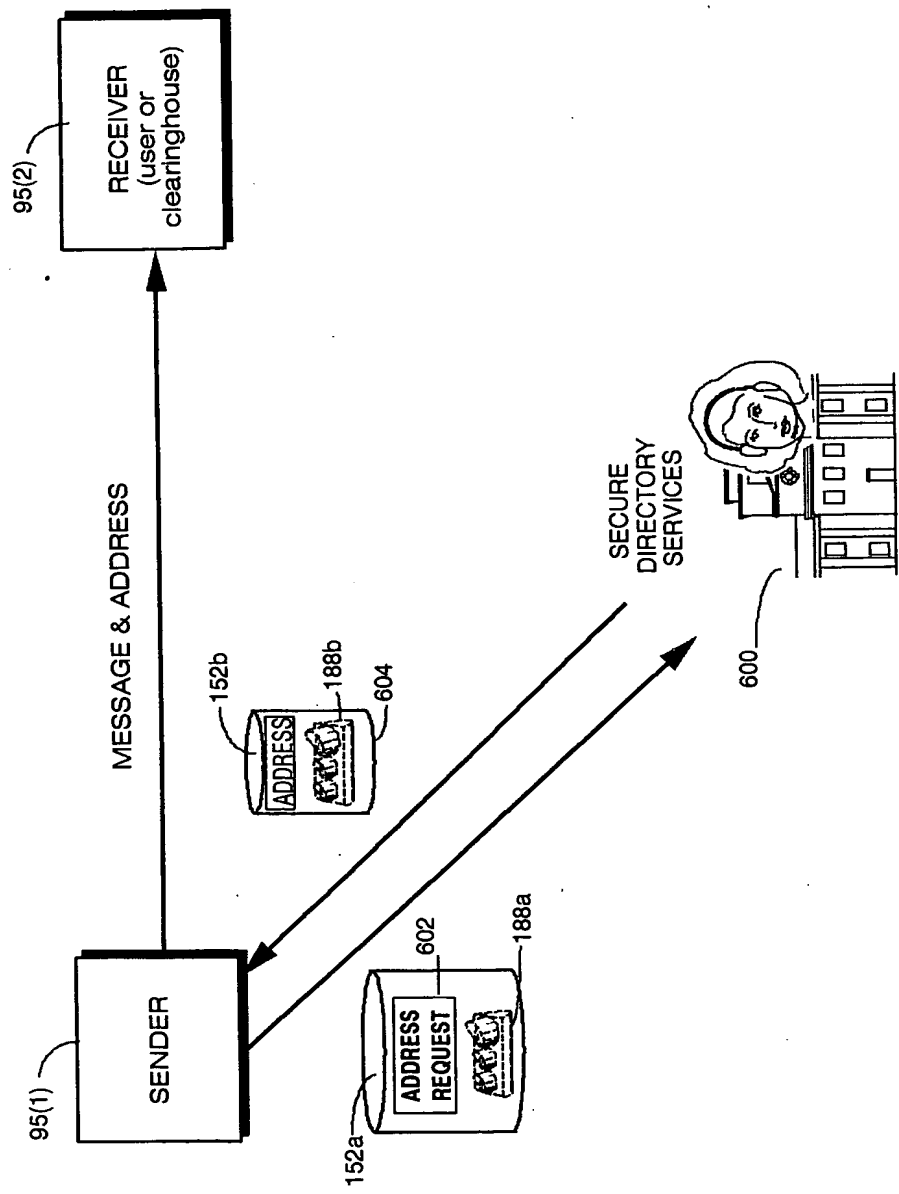


FIG. 55

Example Transaction Authority

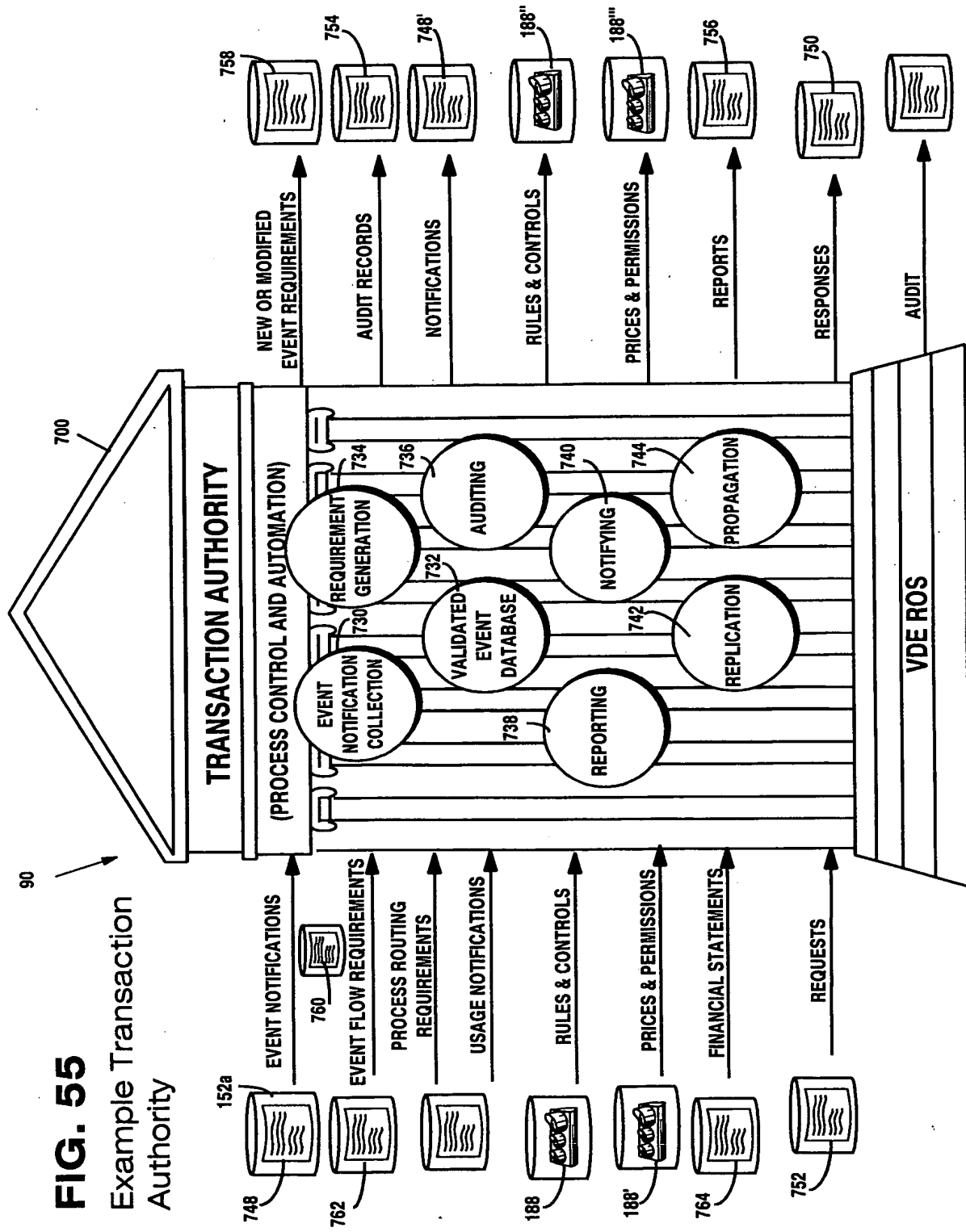
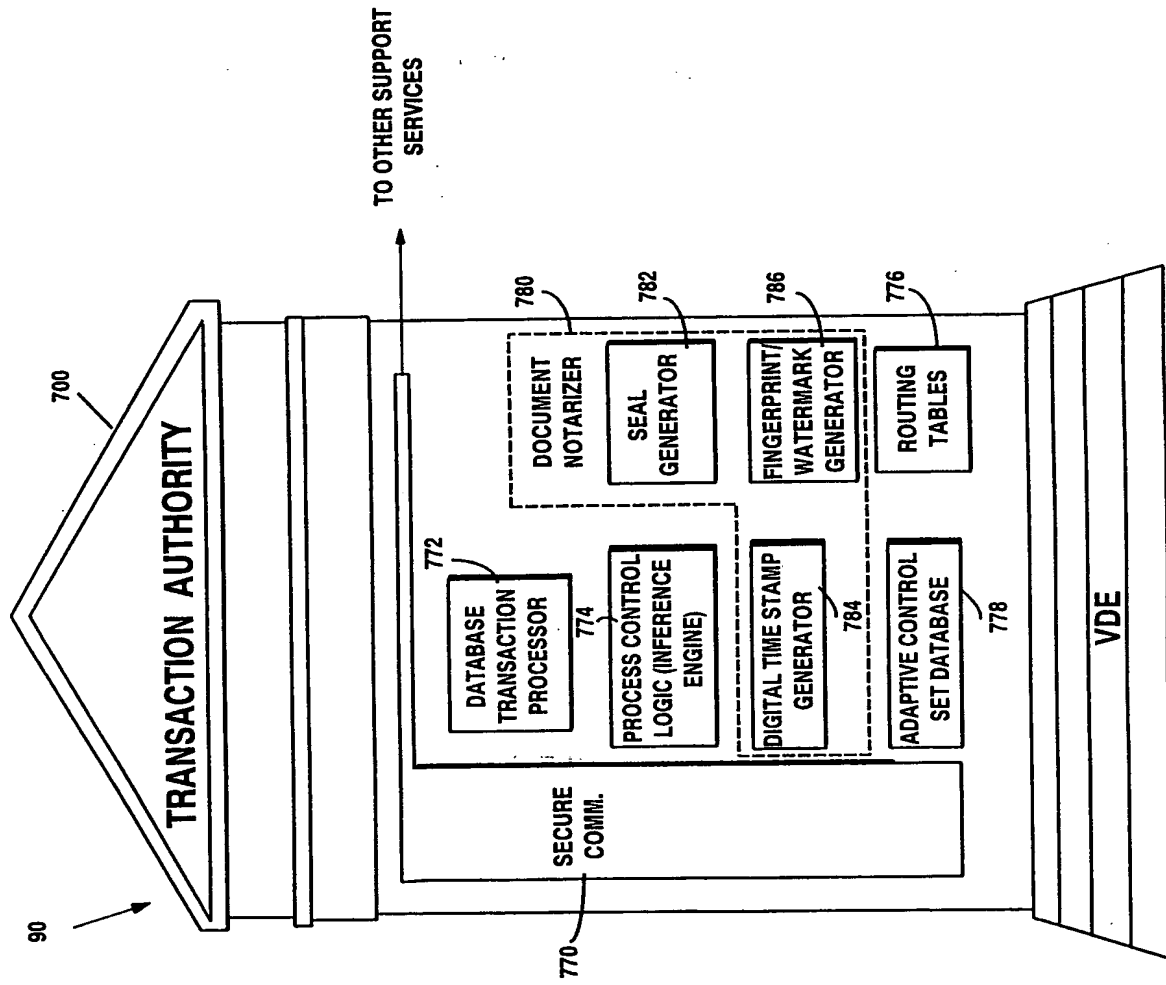


FIG. 56
Example Transaction
Authority



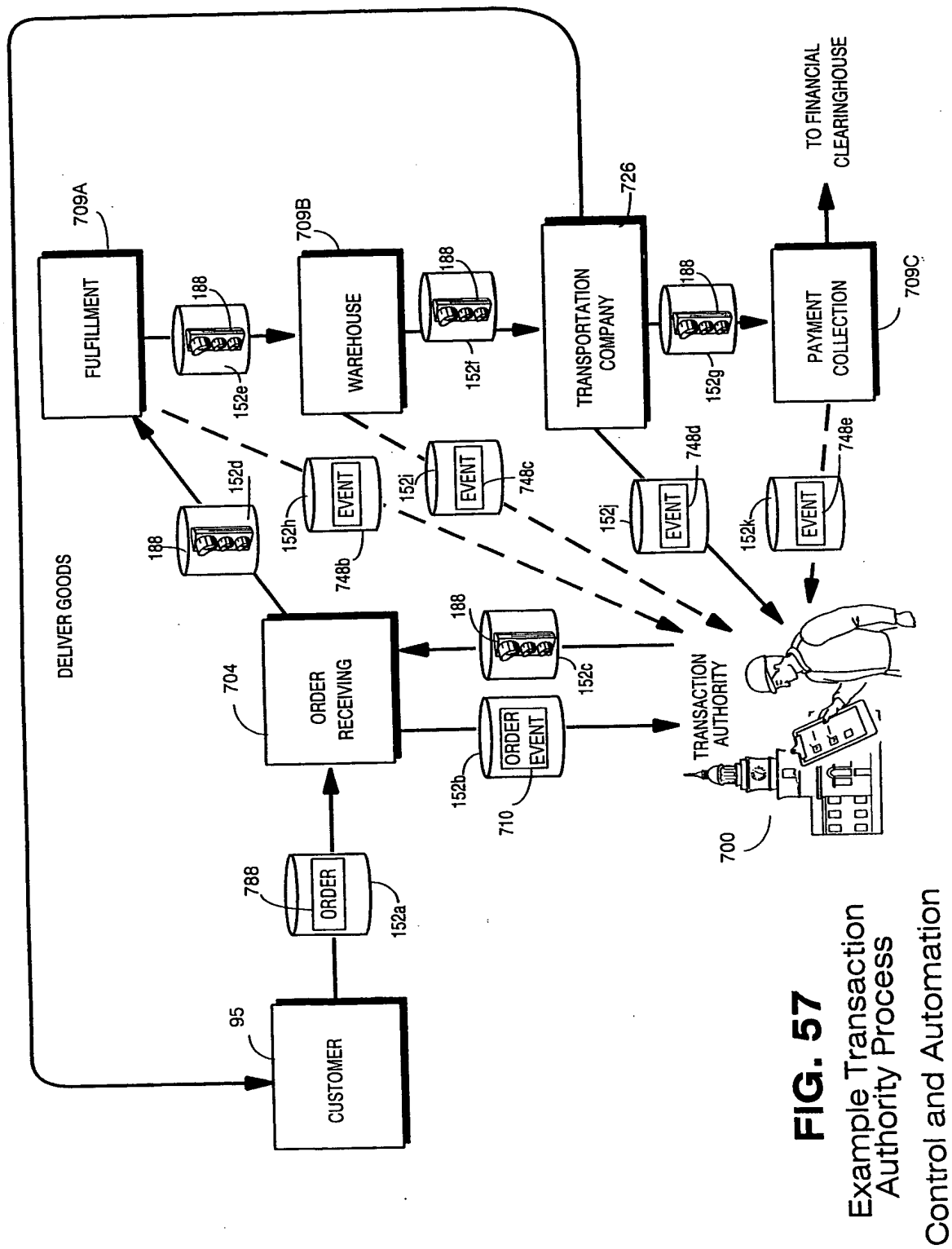


FIG. 58A
Forming a Control
Superset

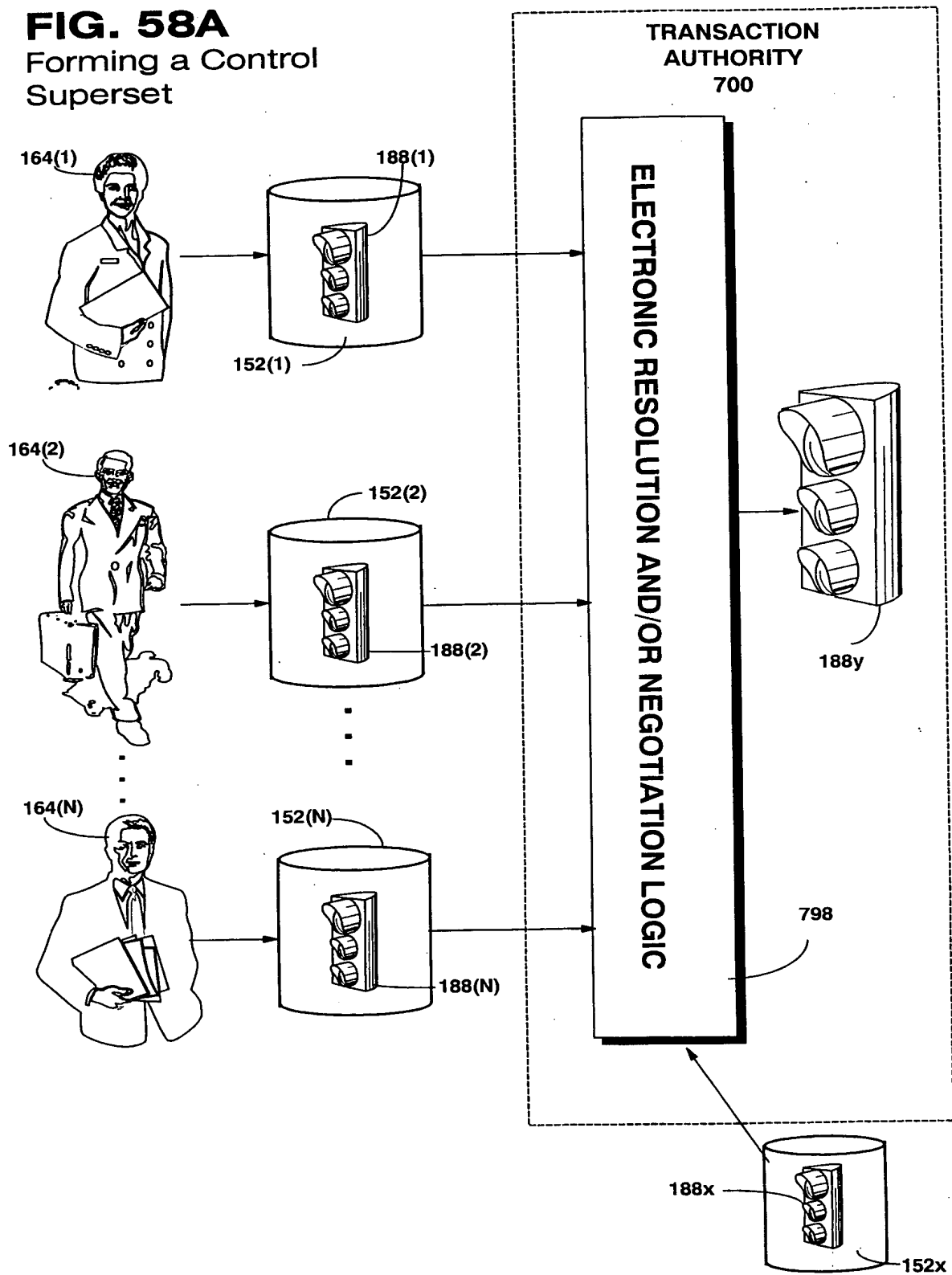
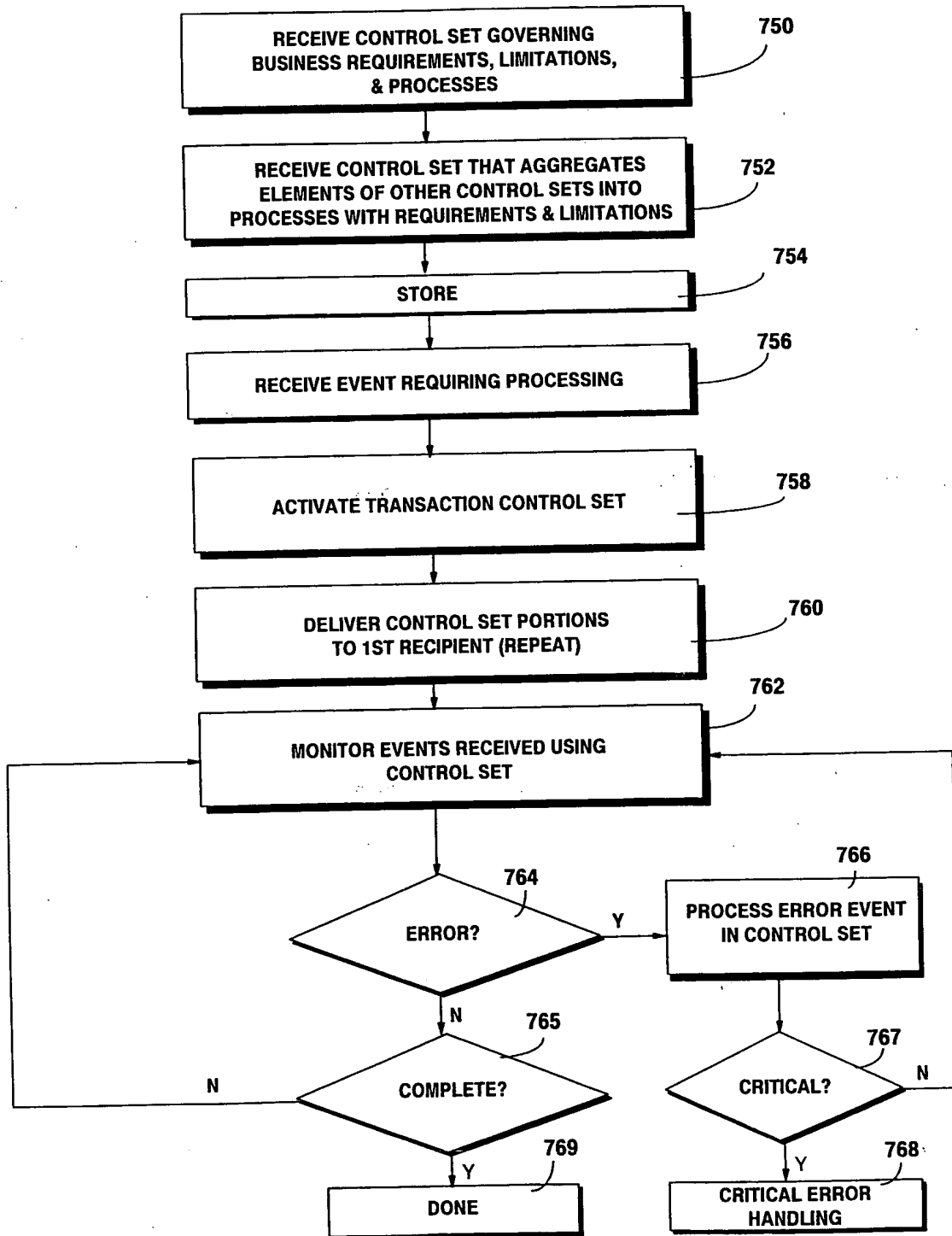


FIG. 58B Transaction Authority Example Steps



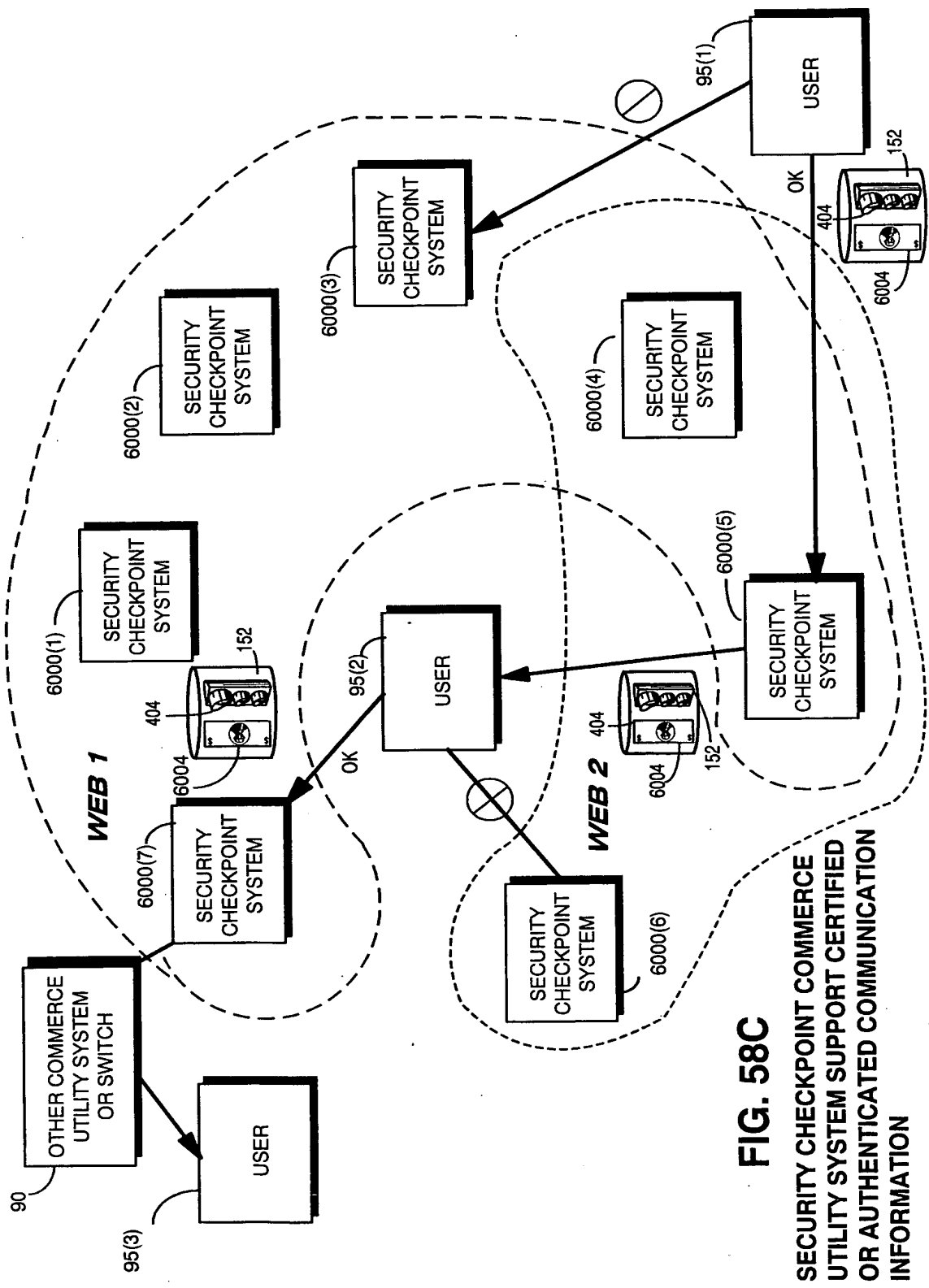
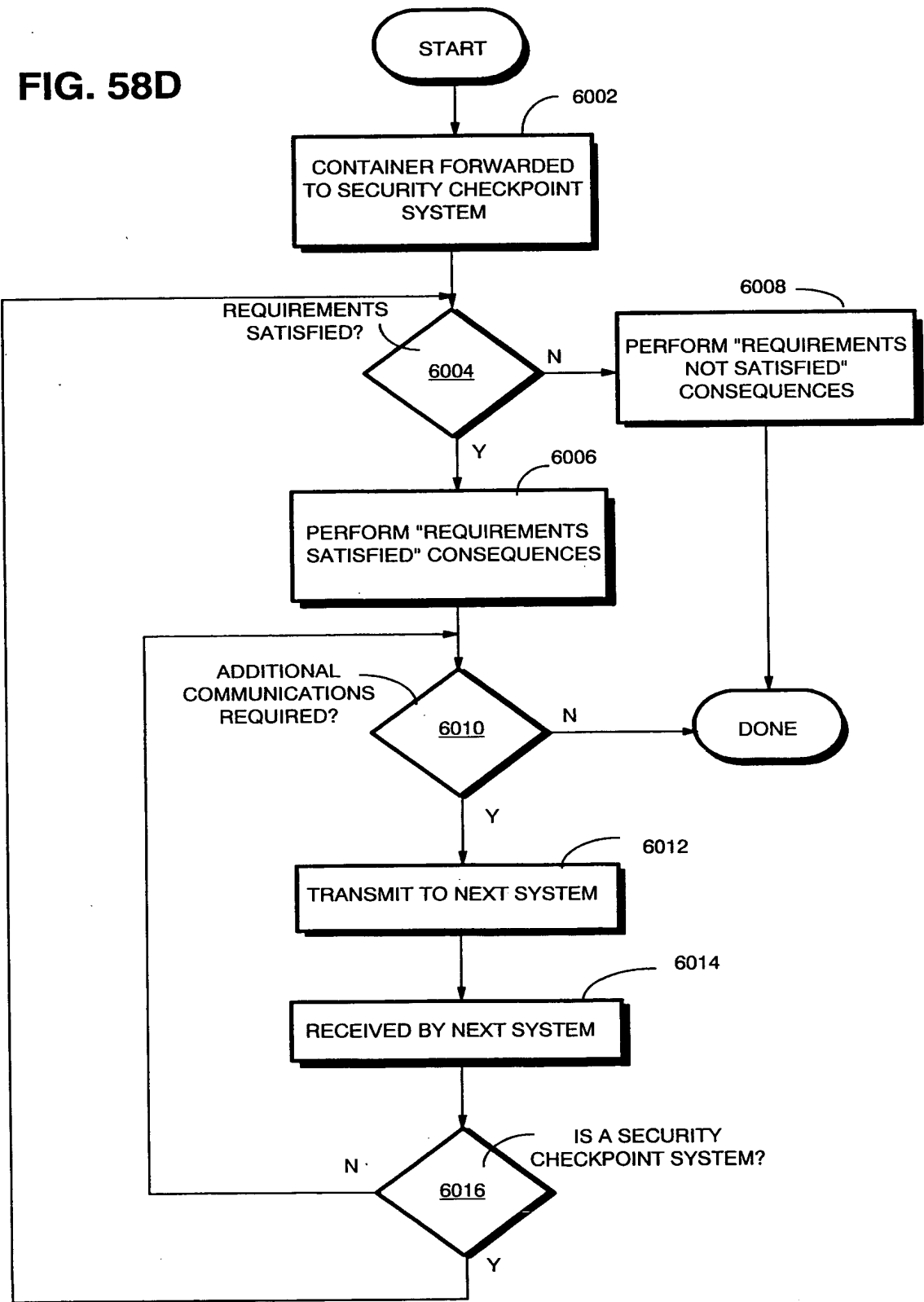


FIG. 58C
 SECURITY CHECKPOINT COMMERCE
 UTILITY SYSTEM SUPPORT CERTIFIED
 OR AUTHENTICATED COMMUNICATION
 INFORMATION

FIG. 58D



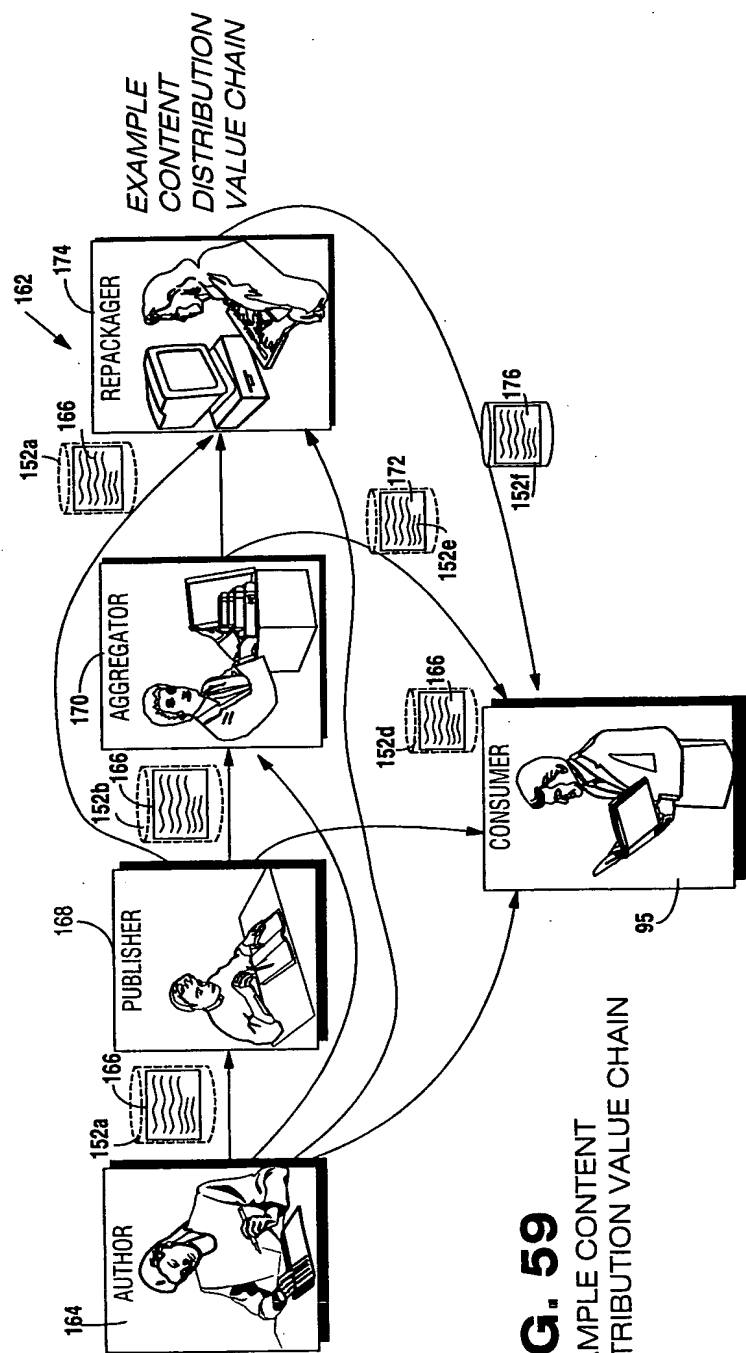
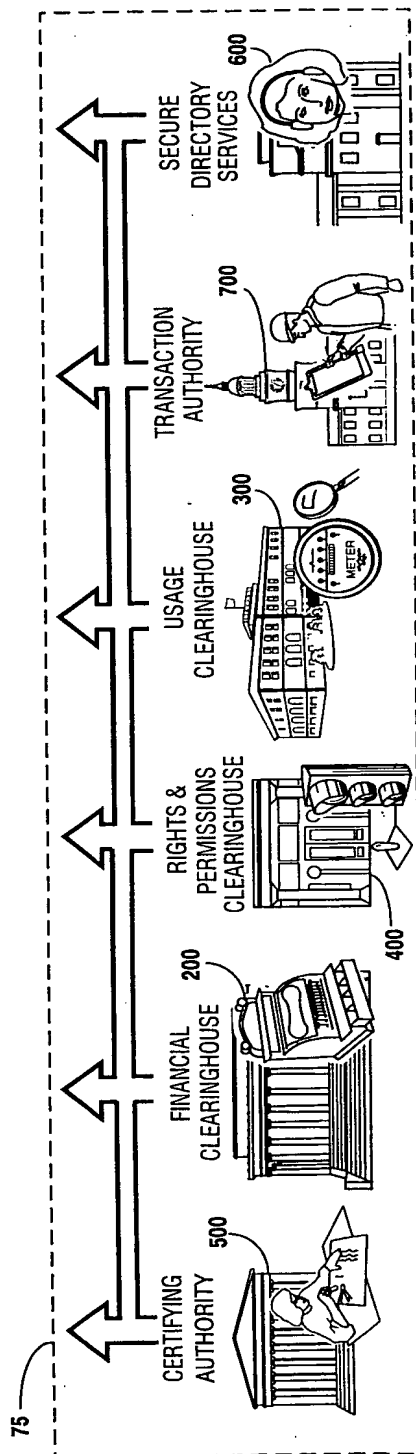


FIG. 59
EXAMPLE CONTENT
DISTRIBUTION VALUE CHAIN



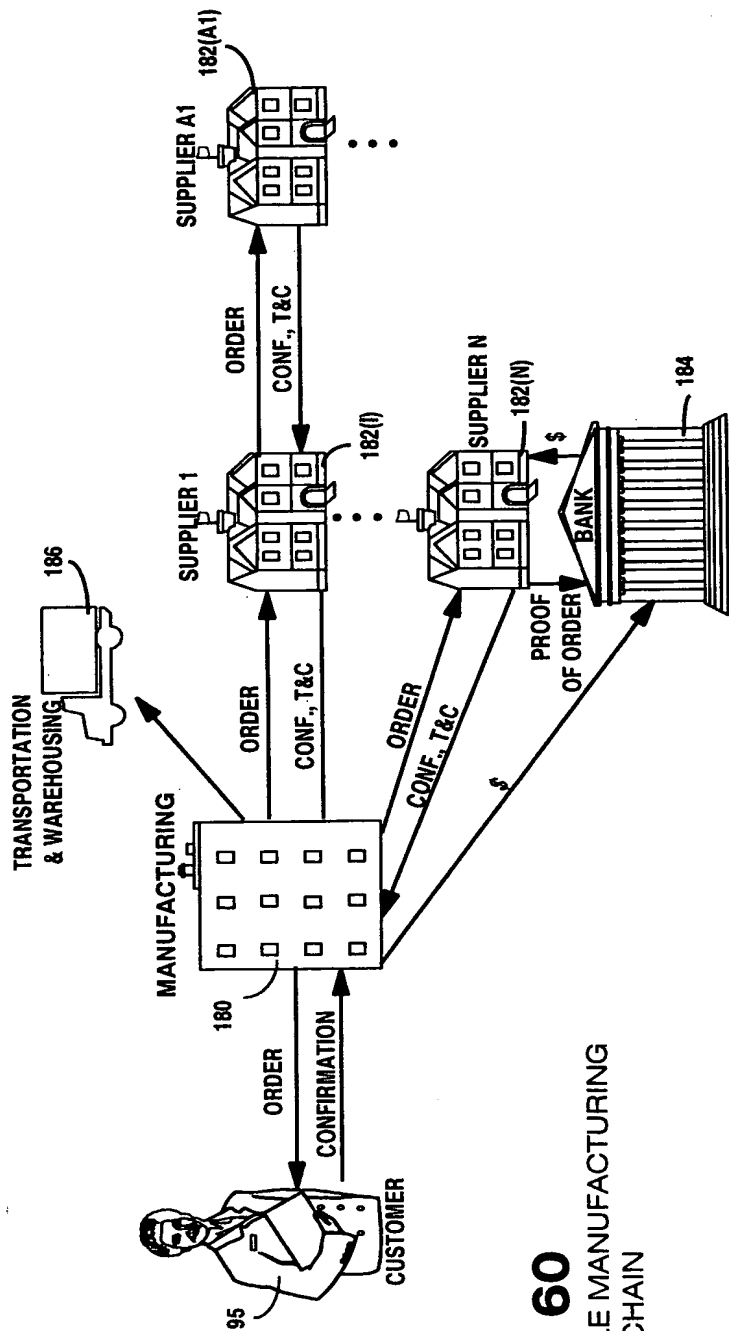
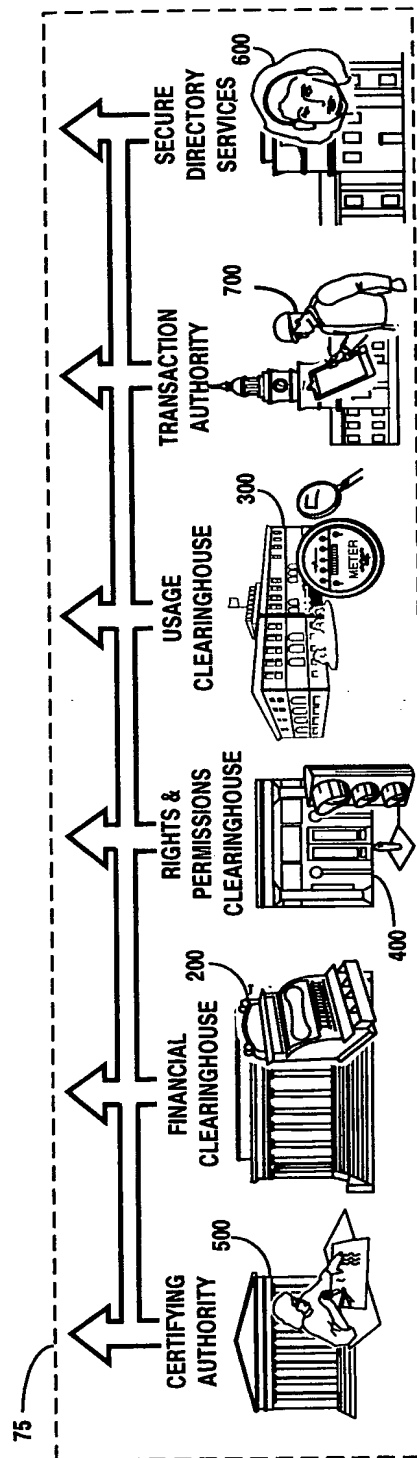


FIG. 60
EXAMPLE MANUFACTURING
VALUE CHAIN



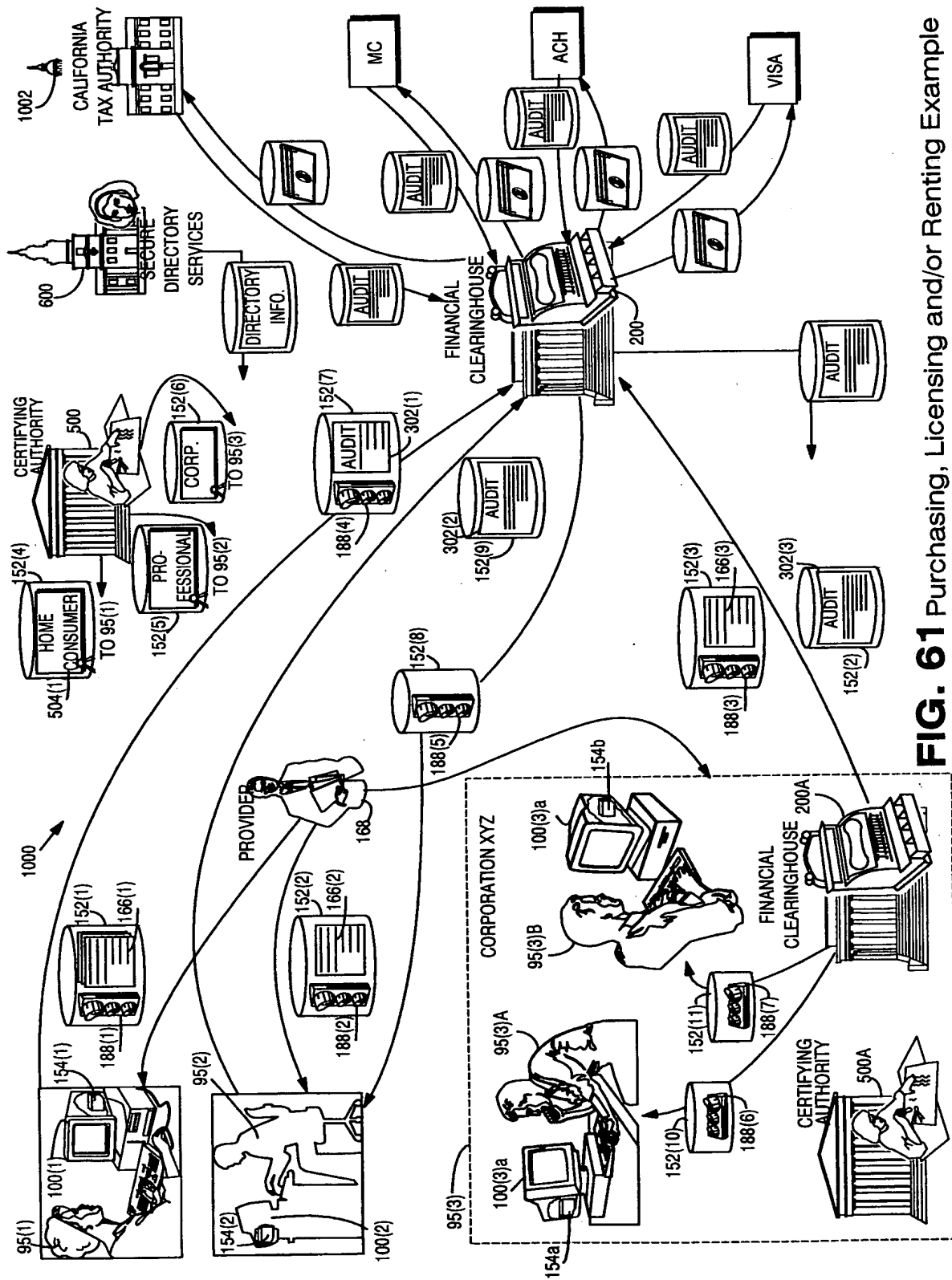


FIG. 62 Example Of Purchasing and Paying
For A Tangible Item

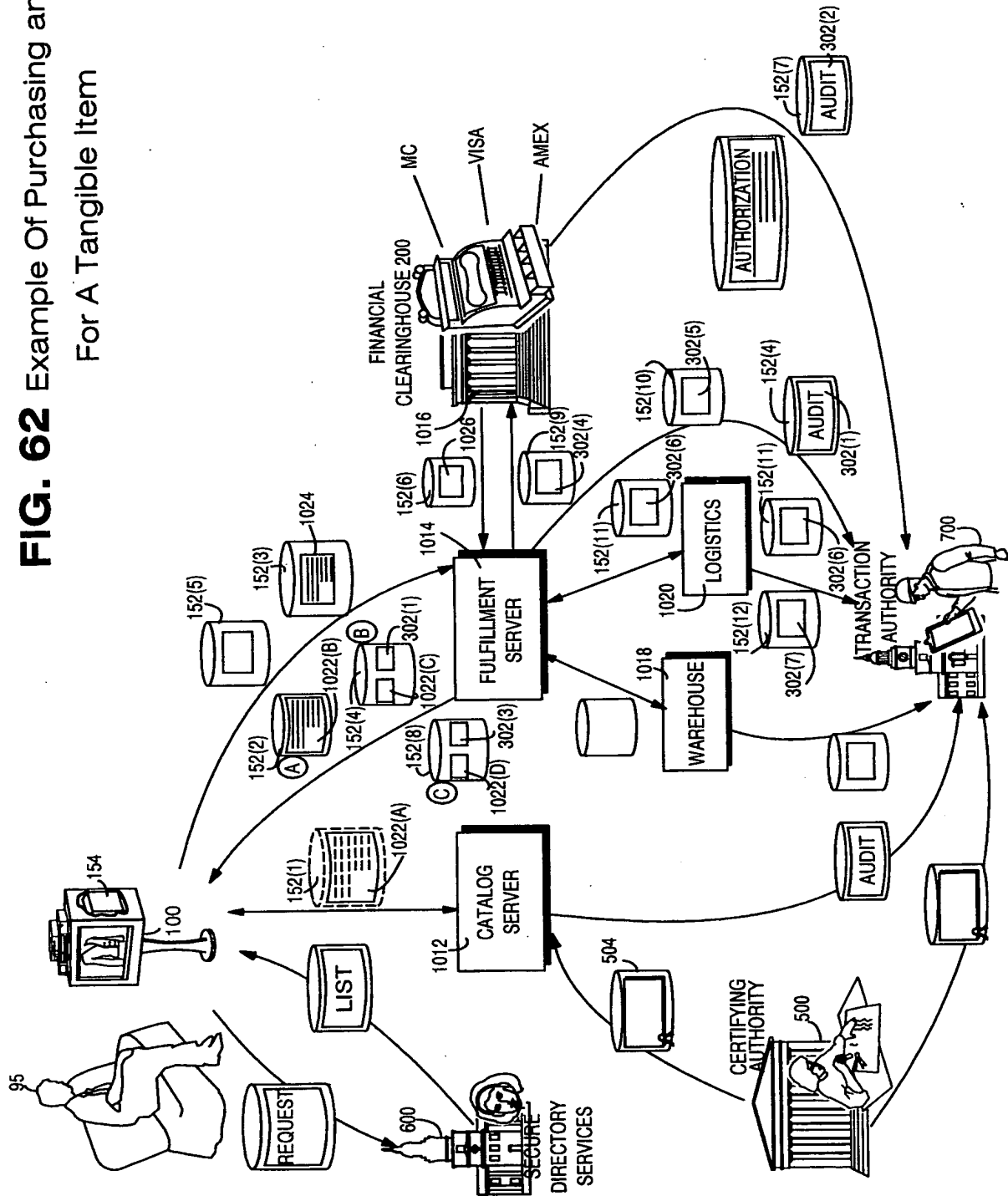


FIG. 63 Example: Customer Securely Pays For Services

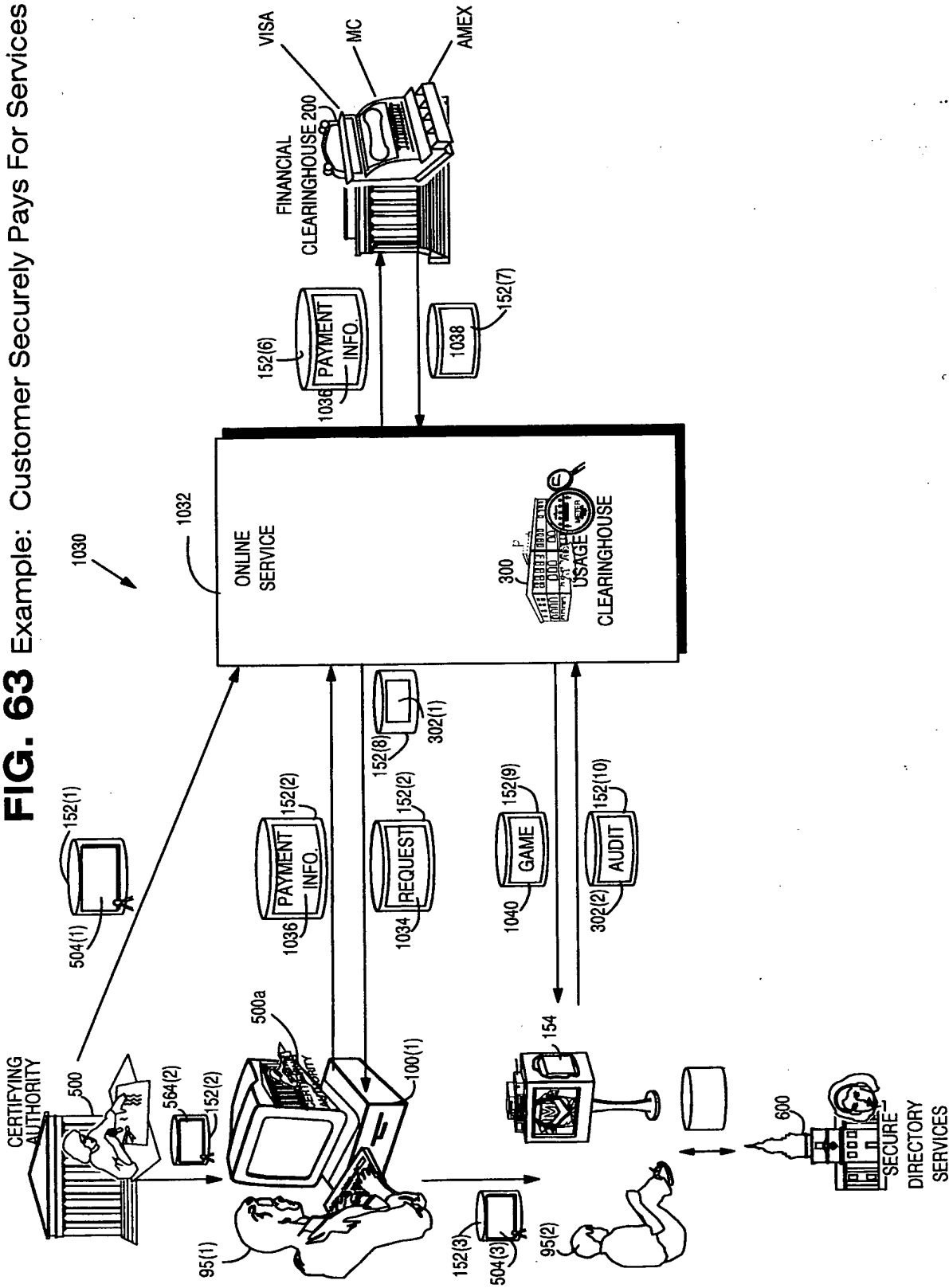
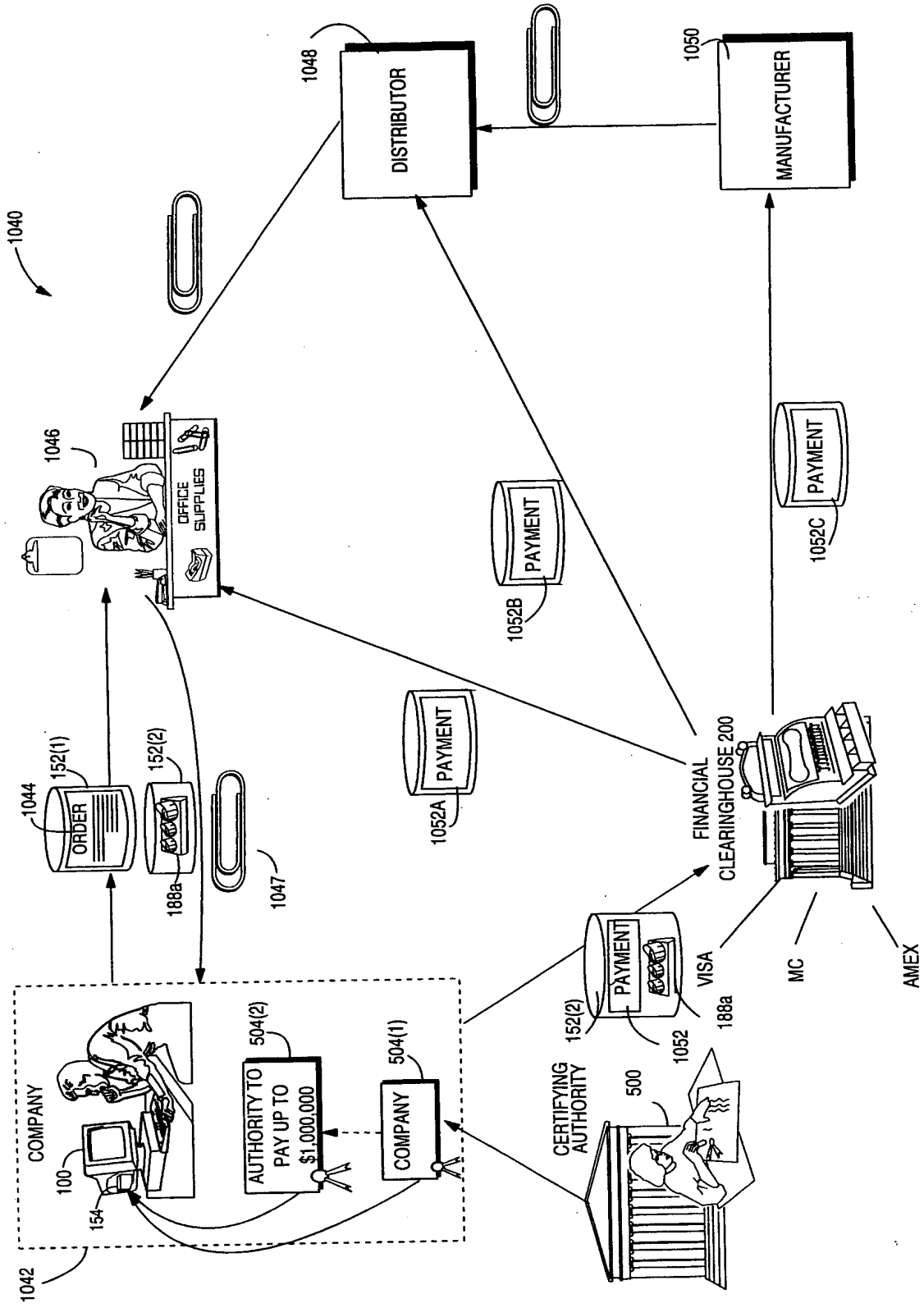


FIG. 64 Example Value Chain Disaggregation For Purchase of Tangibles



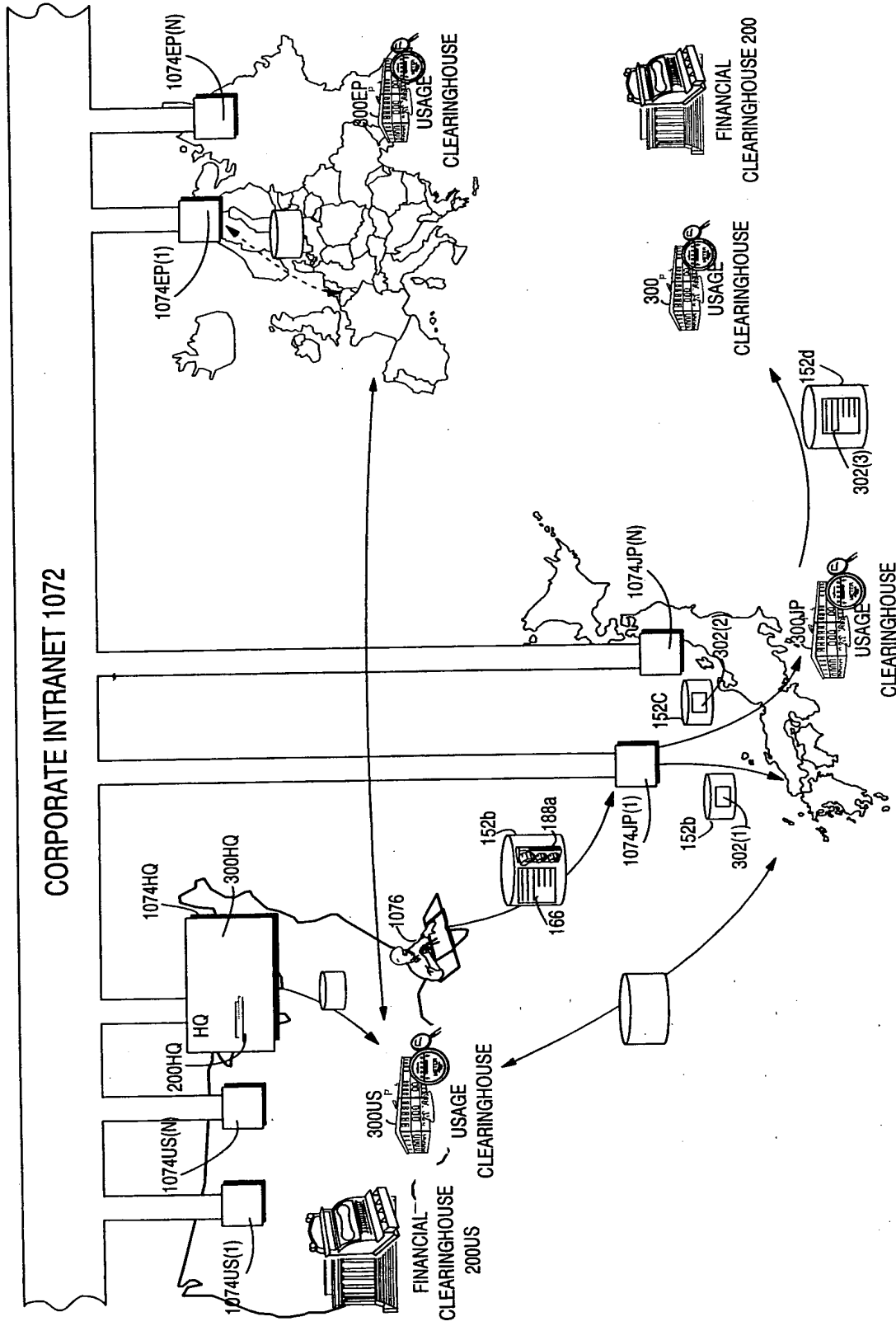


FIG. 65 Cooperation Among Commerce Utility Systems Internal and External To An Organization

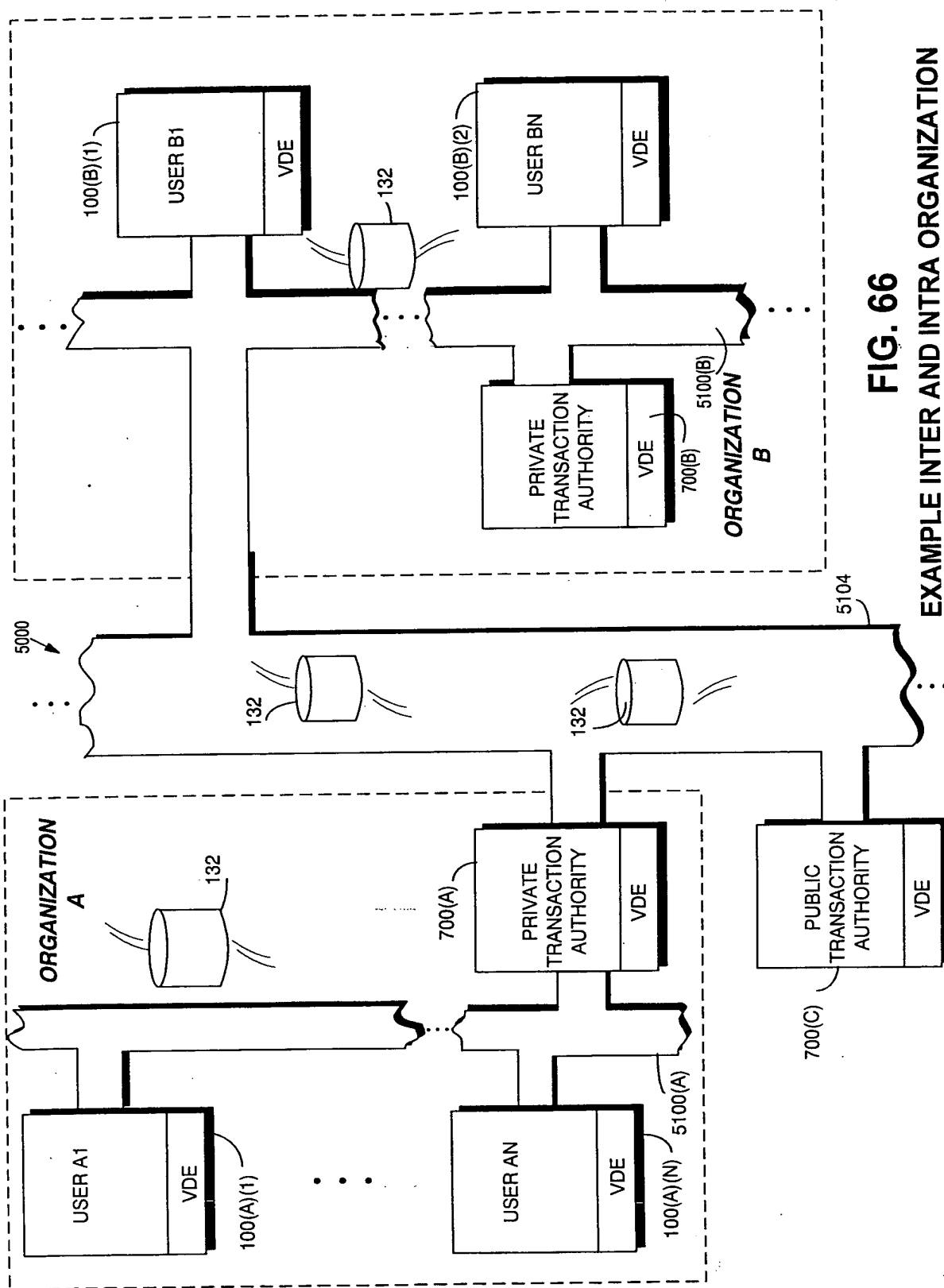


FIG. 66

EXAMPLE INTER AND INTRA ORGANIZATION

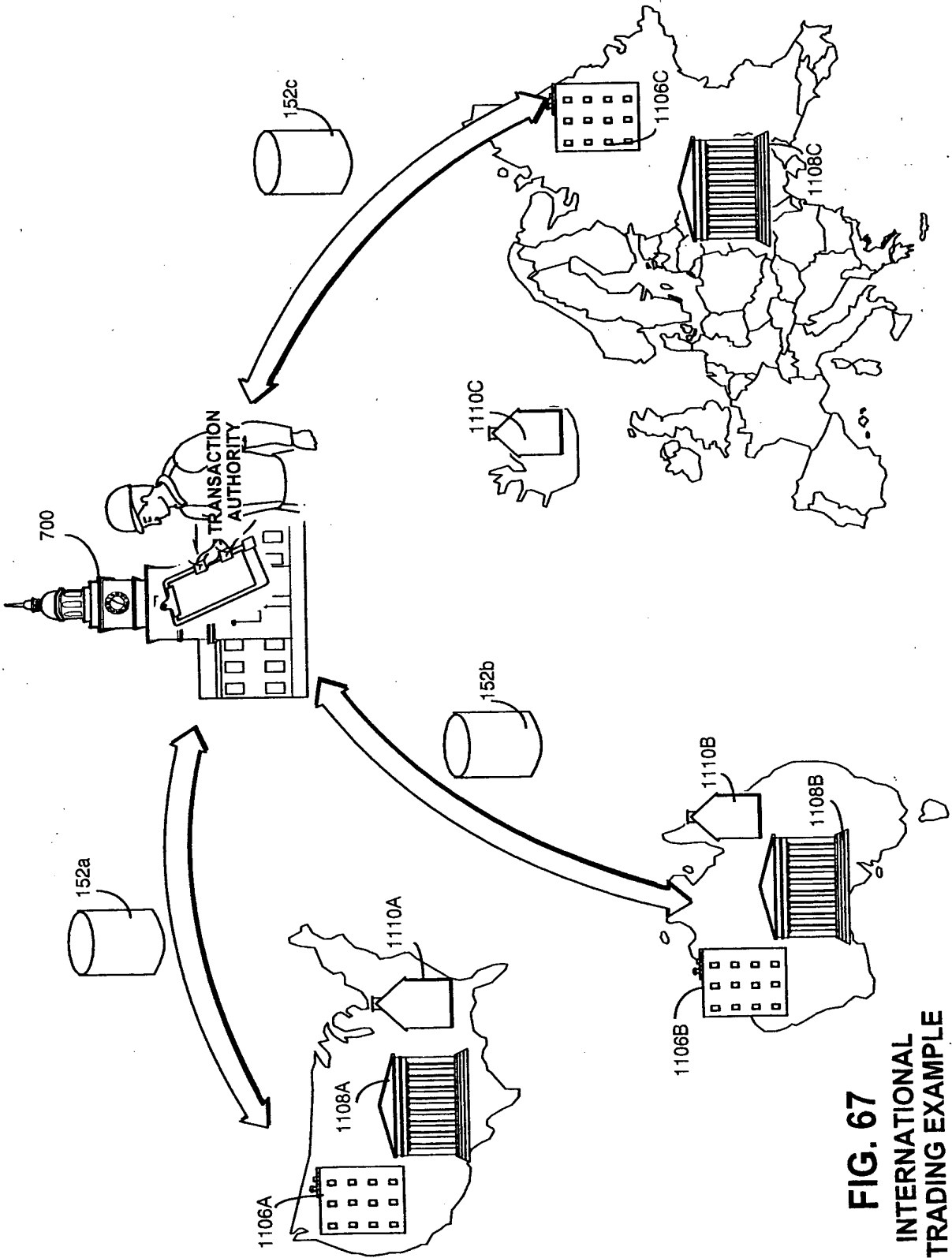


FIG. 67
INTERNATIONAL
TRADING EXAMPLE